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# THE PRINTERS'

# PRACTICAL

# EVERY-DAY-BOOK,

CALCULATED

TO ASSIST THE YOUNG PRINTER TO WORK WITH EASE AND EXPEDITION.

BY

T. S. HOUGHTON, PRINTER.

LONDON:
SIMPKIN, MARSHALL, & CO., STATIONERS' HALL COURT.
H. OAKEY, FISHERGATE, PRESTON.

MDCCCXLI.

347.

ENTERED AT STATIONERS' HALL.

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# PREFACE.

In offering this little work on Practical Printing to the notice of the profession, it is unnecessary to attempt to discuss the merits of those of my predecessors. It may suffice to observe, that they have not that tendency which is calculated either to instruct or improve the junior members of the profession. But though this opinion has been long confirmed by the experience of others as well as my own, it is more than probable, that, had it not been for the flattering encouragement of a few special friends, this little "EVERY-DAY-BOOK" would not now have been in existence.

Having, however, thus attempted to supply the wants and wishes of the young printer, and thereby to fill a position which has been so long unoccupied, I am not without hope, that that indulgence will be extended towards me which is always shown to those who have endeavoured to do what was never done before.

The plan of the work, though new, is yet so simple that it can hardly be necessary to notice even its principal features, or to recapitulate the several branches into which it is divided. Indeed, if the table of contents do not make it sufficiently apparent, I can hardly hope to make it so by any comment of mine: for it has been my principal object to make it clear and comprehensive. But it may be observed,

that though I have endeavoured to explain, under their respective branches, the best method of working in each, neither this nor any other publication can be supposed capable of making an efficient workman without the due application of his own individual energies. I deem it, therefore, sufficient on my part, if I have detailed faithfully the principal essentials of a good workman, and the best method of attaining them, without presuming or professing to impart an ability or a genius on the part of others to acquire them. A knave, for instance, may be advised, and shown how to be a respected and an honest man, but neither the advice nor demonstration could make him so, for unless he himself made an effort, he would be still a knave.

If I have omitted to notice punctuation, it is because I have assumed that such knowledge is or ought to be acquired before the engagement to learn printing is contracted; and not because I think such knowledge is either unimportant or unessential to printers. I think, indeed, that the knowledge of punctuation is so essential to every practical printer, that no one can be a good workman without it. Nor is reading and spelling less so, but no one, I think, will say they should be learned in a printing office, or taught in a work on practical printing. I am not aware, however, that I have omitted anything in the mechanical department of the profession which could be really and practically useful.

Though desirous, and even anxious, that the execution of the "PRINTERS' PRACTICAL EVERY-DAY-BOOK" should at least be no discredit, it can hardly be necessary to say, that it is not offered as a specimen of typography. Surrounded by circumstances which I could neither control nor overcome, the possibility even of attempting to execute it creditably was not only altogether precluded, but forced me to regret that I had ever imposed upon myself the undertaking, and

nearly to abandon the idea of ever putting it to press. Nor is it offered as an accurate literary production. Having written it in those intervals of leisure which succeed the active duties of my profession, it is impossible to suppose that I could have any other aim or end than to make it comprehensive and useful.

Though this work is principally founded on the result of my own experience, I must acknowledge myself indebted to the Encyclopædia Britannica, a valuable and useful work, for the article on Printing Machines, as well as for a portion of that on Printing in Colours. I would also acknowledge the obligation under which I have been placed by the kindness of Mr. Rider, of Liverpool, who has favoured me with his plan of Printing Posters in various colours at one time. Nor am I less sensible of the courtesy of Messrs. Clymer and Dixon, and Messrs. Sherwin, Cope, and Co., in each firm presenting me with a cut of their respective presses. It is with pleasure that I avail myself of this opportunity of publicly returning them, as well as those kind friends who have assisted me with their suggestions, my warmest thanks.

Doubtless, great imperfection will be discovered in this work; yet, I trust, should I be encouraged to attempt another edition, that the suggestions of friends, whose assistance I respectfully solicit, will so far enable me to improve it as will, perhaps, better deserve the countenance of the profession.

T. S. HOUGHTON.

*Preston, Septr.*, 1841.

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# INTRODUCTION.

WELL may the art of Printing be called "Divine." As the glorious orb of day gives light and vigour to animated nature, so the Press, with an influence no less benignant, dispels the dark mists of ignorance and superstition, and diffuses light and strength to intellectual nature. Like the Sun, the power of the Press is felt throughout the world; and its effects acknowledged by every civilized nation. For it is this that spreads far and wide the knowledge of the character of our Creator, and revealed religion! It is to this we are indebted for the promulgation of the arts and sciences, and for every other social and intellectual blessing. In short, it may be asked, what is there, that tends to improve the moral and physical condition of man, that is not fostered by the all-powerful energies of the Press!

Yet, strange, this art, which exercises such influence and is so essential to the improvement of the human intellect, and which faithfully conveys, through successive ages, every record with which it is intrusted, should not have supplied any authentic information either who was its inventor or the precise date when it was invented! These, with the place where the art first shed its rays, are questions upon which there has been much controversy amongst the learned.

The principal candidates for the honor of the invention are Laurence Koster, of Harlem, (Holland) and John Gutenberg, of Mentz, (Germany.) The evidence by which the claim of each is supported, however, being interesting only as matter of history, it is unnecessary here to detail it; and the more so, as that given in support of Koster is merely hearsay, and exhibits some inconsistency both with itself

and probability. It may suffice, therefore, to observe, that John Gutenberg is generally esteemed the inventor, who, when he first practised the art, was a resident of Strasbourg (Germany.) The testimony which supports this belief rests upon better ground than that given for Koster, inasmuch as there has been legal documents produced, one of which proves he had engaged to teach, on certain conditions, "the (then) secret art of printing" to two or three others, who were to be his co-partners, as early as 1438. No book having yet been discovered dated as early as this, the evidence is deemed conclusive.

Gutenberg's new business proving unsuccessful at Strasbourg, he returned to Mentz, where he was joined by John Faust or Fust, a wealthy goldsmith, and Peter Schœffer, a scribe. The advantages of this union were manifested in the superiority of their subsequent work; Fust having a practical knowledge of working in metals, and Schœffer having acquired some taste as an illuminator of MSS. then in use. Gutenberg's imperfect types, which were merely cut out of single pieces of wood or metal, with considerable patience and labour, soon gave place to the beautiful cast types of Schœffer, to whom the entire honor of this invention is attributed and allowed; this, doubtless, places him at once at the right hand of the inventor of printing.

Typography began now to advance rapidly both in neatness and beauty, which deservedly give the early works of these printers a peculiar worth; and though they are valued for their antiquity by some, and more prized for their scarcity by others, yet all allow them to be unexceptionable specimens of the art. The partners of Gutenberg did not long continue with him, as Fust and Schœffer began another establishment. This, perhaps, may have tended to stimulate the exertion of each to raise his own to the highest eminence of public favour. It is said, indeed, so anxious was Fust to obtain the public support, that he went to Paris, where the art was unknown, and offered an edition of the Bible, just published, in such numbers and at such prices as excited a suspicion amongst the priesthood, by whom

he was accused of multiplying the Holy Writ by the aid of the black art; he was, consequently, forced to secure his safety by flight. Hence the origin of the tradition, to which many "grave and discrete old men" have given credit—of the "Devil and Doctor Faustus."

Hitherto the mysteries of the art were confined to the city of Mentz, where, perhaps, they might have remained much longer, had not the capture of the city, by Count Adolphus, of Nassau, in 1462, interrupted the schemes and labours of the inventors and their workmen. Distracted at home, they were induced to seek refuge in other states, and thus the knowledge of the art became, in time, diffused throughout the whole civilized world. Fust, settling in Paris, died, full of years, of the plague in 1466, while Gutenberg, who had declined business a few years previously, survived Fust only two years, and died in February 1468. Schœffer, surviving both, continued to carry on his business, and, in conjunction with Conrad Henlif, published many works, till 1502, when it is supposed Schœffer deceased.

The honor of introducing the art into England is ascribed to William Caxton, who, taking advantage of the capture of Mentz, it is said, secured one of Fust and Schœffer's workmen, and established a printing office at Cologne; whence he subsequently brought his materials to Westminster, and published his first book, in England, on the "Game of Chess."

From this time the art has gradually extended throughout the kingdom; while the inventive genius of succeeding generations has assisted to improve its character and utility. For though it had in a few years arrived at full maturity, and left but little room for improvement in casting types, the superiority of the presses now in use, over those of the early printers, is too manifest to need comparison. Nor is this all, the printing machine, for expedition, is an invaluable acquisition; and gives the art facilities for diffusing information which it never before possessed. But though the art is thus improved and extended, the condition of its professors affords but a sorry theme for contemplation.

Great as the necessity undoubtedly is for a constant supply of hands, it is to be regretted that that supply far exceeds the necessary demand. Hence the cause of such numbers of unemployed printers, at the present day, being forced to "tramp" from town to town in search of a precarious subsistence. Without, however, deciding what is the principal cause which has produced so many superfluous workmen, it is certain that competition has yielded at least its proportional share. As apprentices create journeymen, so journeymen create little masters. These, knowing themselves incompetent to compete with their more fortunate neighbouring tradesmen, find it convenient to reduce their scale of prices to attract work, and make further additions to the number of apprentices to execute it. Young men thus brought up, and left to be their own instructors, cannot be supposed to be either profitable as servants or esteemed as workmen. Becoming journeymen, they are cast upon the world as ignorant of the art to which they have served seven years as a boy, under more favorable circumstances, of only six months' servitude. Can it be wondered at, then, if such hands are necessitated to "tramp" for employment, and to solicit the assistance of their more fortunate brethren, even were their numbers less? Numerous facts might be adduced, to show the present amount of incapacity in the trade, but they are unnecessary; every observer in the profession may supply instances that will illustrate the fact. The condition of this description of hands is more to be regretted, because greater the necessity is for their improvement and less is the probability of their attaining it. If a bad workman be never employed while a better can be obtained, what chance, I would ask, is there for an indifferent hand being improved at journeymen's established wages? It may, indeed, be possible, but certainly not probable.

To such as desire to redeem the time, and are anxious to improve themselves, this little "Every Day Book" is designed as a special assistant. Whether it be qualified to support that character, the profession must decide; at pre-

sent it may only be observed, that the desire to serve the less fortunate in the profession must plead for the insufficiency of the attempt. Under the influence of this desire, it will be endeavoured to explain, and elucidate by example, such methods of working as ingenuity has devised, reason supports, and experience approves. The advantages of executing work by system are too obvious to need comment; they are such as promote the interest of the employer as well as the employed. Those who are thus guided by principle, contain within themselves a perpetual source of gratulation, while those who work only by mere chance but rarely please either themselves or their employers.

Though enough has been said to induce every young workman to strive to obtain a respectable stand in the profession, it may be observed, in conclusion, that with attention and perseverance, there will be no difficulty to stop his progress. It may, however, be remembered, that knowledge and proficiency in printing, as in any other art, are only acquired by exertion; and while credit is due to all who strive for them, he who obtains them only receives the reward.

# PART I.

## GENERAL OBSERVATIONS.

LETTER-PRESS Printing is divided into two parts, namely, CASE and PRESS. The excellence of the art depends upon the amount of perfection attained in both.

PRESS, as applied by the members of the profession, distinguishes the duty of Pressmen from that of Compositors, and includes making-ready a forme, working-off, &c.

CASE, in its most comprehensive sense, includes all the various operations which characterize and distinguish the duty of a Compositor, whether he be employed in a Newspaper-office, in a Jobbing-office, or in a Book-office. In this sense, it comprehends composing, making-up, imposing, correcting, distributing, &c. In a more limited sense, it is applied to composing only. It is the intellectual labour required for this portion of the profession that necessarily and deservedly raises it above every other.

In the several branches into which Case is naturally divided, the standard of ability in one is no particular recommendation in the others. Each having its own, each is judged by its own. By one, a quick compositor is acknowledged a good hand; by another, good taste and a ready method of getting up bills, circulars, cards, rule-work, &c. are considered essential to a good workman; while by the third, the ability to point correctly and space even, to make up matter into pages neatly and impose them readily, are deemed indispensable. But though a journeyman may be accounted a good hand by any one of these, his chances of obtaining a situation must be materially reduced, if he cannot, with equal confidence and ability, bear the test of the other two. As it is a practical knowledge of those things

which distinguish each branch that constitutes a good general workman, it is the undoubted interest of compositors to improve such opportunities as may tend to assist them in acquiring it.

News-work, Job-work, and Book-work, therefore, containing every thing that is essential for a young compositor to know, I will notice them separately, and endeavour to familiarize those peculiar features which characterize each.

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## CHAP. I.

## NEWS-WORK.

ITS PECULIARITY.—LAYING-UP.—DISTRIBUTING.—COMPOSING, TAKING COPY,—CORRECTING.—MAKING-UP.—IMPOSING, ETC.

The most striking and peculiar feature of a well-conducted Newspaper is systematic order, terse condensation, and lucid arrangement. But though the editor may regard the working out of these things as his peculiar province, there can be no question but that it is incumbent on the printer to know something of the principles by which they are regulated and accomplished. This, with a knowledge of distributing, composing, and making-up, will qualify a compositor for any news-house in the kingdom. The test of a good news-hand, however, being more what he does than what he knows, the quality of his composition often yields to quantity, and stimulates him to greater exertion. Hence it is that the swiftest compositors are found on newspapers, many of whom, being ignorant of every other part of the profession, can work on nothing else. To be qualified, then, for a news-house, and to empty as often as others, attention to those apparently trifling movements which consume so much of some compositor's time, is necessary.

Amongst other things tending to expedite a compositor's work, is clean letter; but to obtain this, the matter must, before it is distributed, be layed-up. This, done well, would obviate the unpleasantness of picking up letters that stick to each other, and the difficulty of bringing the thumb from those in the composing-stick without breaking the line. A few words, therefore, on this head, may not be altogether superfluous.

### LAYING-UP MATTER

Is a very necessary process, yet so simple, that I should not have thought it required a particular notice, had not experience demonstrated the possibility of even a journeyman printer being ignorant of it. A fact having thus suggested the propriety of a special notice, it may be observed, that the object of laying-up matter, or a forme, is to thoroughly cleanse it from any dirt or lye which may remain between the lines after it has been washed by the pressman. The system practised on a newspaper is, after unlocking the forme on a letter-board, to fill a news galley with the matter, to quoin the galley up, and to take it to the sink to rinse. While there, if the lines be well opened with one hand, and plenty of water poured on the matter with the other, there will be no need to rub the fingers with alum to prevent, in distributing, the types slipping, or to do any thing else to avoid the evils arising from dirty letter. The matter thus cleansed, is then ready for

### DISTRIBUTING,

Which is an operation that requires more attention and practical skill than is necessary for laying-up matter. To distribute correctly, the mind, as well as the hand, must be employed; a clean case being only obtained by the united effort of both. Indeed, while the careful attention of the first to the various complicated combinations of the second can only constitute a good workman, it cannot be supposed

that any system could supersede the care which is necessary to deposit every type into its respective box. The mind, therefore, must be engaged in directing the fingers where and how to deliver the letters held between them, or the annoyance arising from a foul case must be tolerated. I am the more anxious to impress this fact, not only because a clean case is the first essential and the best means of ensuring creditable proofs, but because nothing can compensate for the want of care and attention. Whether the matter out of foul cases be corrected in the stick or on a galley, the time which it consumes, being lost, is equally injurious to the character and interest of the compositor.

Having acquired the habit of distributing correctly, how to do so expeditiously ought next to be considered. The first thing towards attaining this object, is possessing a desire to do a given quantity of work in the least possible time, and a determination to follow any plan by which it can be accomplished. This desire will produce exertion, and exertion, aided by system, success. But as every system is made up of apparently trifling observances, nothing must appear superfluous which tends to save time. Place the galley, then, containing the matter for distribution, as near the cases into which the letter is to be distributed as convenient. Before lifting a handful, the size of which must be regulated by the compositor's ability and inclination, press it on all sides and make it compact, that it may be raised with safety. Attention to this is a compositor's only security from accident, and, consequently, pie. A handful being lifted, slant the matter a little, that every word on the top line may be known or read, before it is taken up by the fingers to distribute. When a word is once seen and taken from the line, avoid, by all means, looking at it again. Looking frequently at a word of only a few letters being the most fruitful source of losing time, and, perhaps, the least thought of, the greatest care is required to guard against it. Be careful, also, in sorting the spaces; perhaps the best method is to mix the middling and thick together, and keep the thin and hair spaces separate. The advantage of

this is the superior facility it affords for spacing out lines, without taking out any spaces already in, by adding a thin space to the middling. The last letter of each word being deposited, the eye reverts again to the matter and prepares the mind for its work, while the hand again returns for another word. And thus it is that this portion of case is done with neatness and expedition.

Distributing, which on a weekly paper usually occupies a day and a quarter or a day and a half, being done, all hands are ready to take copy, which gives occasion to notice

## COMPOSING.

This is certainly the most important part of the profession, whether it be viewed in relation to society or to the art itself. To composing, all the other operations are subservient; and hence the derivation of Compositor. The mental exertion required to execute it creditably, is much more intense than that for jobbing; a fact, perhaps, sufficiently manifested by the sallow and unhealthy appearance of the majority of news-hands. Indeed, the continual application of the mind necessary to compose well, is always fatiguing, and sufficient to induce every compositor to adopt any system that might tend to lessen it; but when the unnecessary and injurious habits of nodding the head, throwing out the arm, hitting every type against the setting rule, violently agitating the body, &c., be superadded, compositors appearing, or really being, unhealthy, is only a natural consequence. These, and such like motions, are the more to be deprecated and avoided, not only on account of their exciting an unnecessary degree of exertion, but because they also impede that very progress which they are designed to assist. Surely, then, to compose with ease and certainty, is well worth an effort. Such an effort, however, to be successful, must be guided by principle, and directed to a given point. It is not sufficient to strive at random; every necessary motion, contained in the thing desired, must be reduced to some degree of order, and each be made to

contribute its portion in the total result. For instance, if it be our object to save time in composing, the principle upon which it must be accomplished must be either to bring the type quicker to the composing-stick or to reduce the distance between them. Either would produce the object proposed, but it will perhaps be sufficient to test the second. If, then, in doing so, the composing-stick be held close to the body, while the word "the" is composed, the distance from the stick to the box of each letter will be found, on reference to a lower-case, to increase respectively. With the stick thus held, the right hand must travel forty and a half inches, viz.—

| | | | |
|---|---|---|---|
| 4½ | inches to and from the | "t" | box; |
| 13½ | ditto | ditto "h" | „ |
| 22½ | ditto | ditto "e" | „ |

40½ inches; or 3 feet 4½ inches.

Applying the principle that a part is less than the whole, and bringing the stick as near to the "h" and "e" boxes as it was to the "t" box in the above instance, the distance over which the hand will move, in conveying the same word to the stick, will only be thirteen and a half inches; viz.—

| | | | |
|---|---|---|---|
| 4½ | inches to and from the | "t" | box; |
| 4½ | ditto | ditto "h" | „ |
| 4½ | ditto | ditto "e" | „ |

13½ inches; or 1 foot 1½ inch.

If this amount, thirteen and a half inches, be taken from the first, forty and a half inches, it will be seen, that the actual distance saved in composing this word by the second method will be twenty-seven inches. This difference of space saved in a word of three letters, being sufficient to set the word again twice over, must, of course, produce a corresponding saving, also, in time. That is, if forty and a half inches traversed by the hand in picking up three

letters, occupy three seconds of time, it follows, that one-third of that space (thirteen and a half inches) must only occupy one-third the time, or one second, supposing the hand to move at one uniform rate in both instances. Whether any more time be saved must depend, of course, upon the velocity at which the hand moves in picking up the types, and the certainty with which they are raised and brought to the composing-stick. To take up, indeed, every letter for which the attempt is made, is very important, and any system that does not provide for securing it is incomplete. For it can be no advantage to a compositor, however much time he may save in one way, if he lose it in another. A system, therefore, can only be said to be a good one, when every thing of which it is made up unites to obtain the object for which it was devised.

Though such be the essentials of a good system, there are other conditions, without which its advantages will be lost; and these are, that it be properly understood, and rigidly followed. In explaining my own, for the benefit of those who do not possess a better, perhaps the first may depend much upon my success in making myself sufficiently intelligible. With the second, however, I can have nothing to do.

In beginning to compose, then, the first thing to be attained is an easy position; one in which we can remain the longest time with the least fatigue. If we consult nature, which appears to be the best guide, we shall find that to gain this we must stand erect, with the arms down, at rest, and perfectly free. This being the easiest position in which it is possible to stand, it follows, that the further the body or limbs are removed from it, greater is the inconvenience experienced. For instance, if the hand be raised to the stomach, the first position will be but little altered, but nevertheless it will be so much so as to cause a corresponding degree of inconvenience. If, from this position, the elbow be raised parallel to the shoulder, the first position will be further altered, and the alteration will be attended with still greater inconvenience. If this view of

these three positions, then, be correct, it appears, that the nearer we come to the first and the better, because it can be sustained the longest. As, however, it is impossible to compose in the first position, without incurring a greater amount of inconvenience than any, the inquiry is, which is the next best? And the answer to this is, obviously, the second, not only because it approaches nearest the first, and, consequently, less liable to fatigue than the third, but because it offers greater facilities, as will be seen by-and-by, for working out the system of which it forms a part.

Having decided that to be the best position which requires the hand to be raised only to the stomach, the height of the frame necessarily appears also determined, because, to have the frame any higher than the stomach, that position would be destroyed. For these reasons, then, and with all due deference to the opinion of the author of the "Printers' Grammar," Mr. C. Stower, who strongly recommends his readers to work at high frames, I will venture to fix an inch or so only higher than the elbow as the standard for a compositor's frame.

If the advantages of a high frame be greater than those of the one I have named, it may be inquired, in what do they consist? Is it easier or more healthy, to work at a high frame? Certainly not, for even Mr. Stower says—"though to work with his (a compositor's) cases on a level with his breast may at first tire his arms, yet use will so inure him to it, that it will become afterwards equally unpleasant to work at a low frame."* I know, indeed, that any habit may be acquired, however repugnant to a man's ease and health, but that fact no more proves an excellence in the thing acquired than chewing tobacco proves that *luxury* necessary to health. But even admitting that a high frame will keep "the body in an erect position," and prevent round shoulders, the question may still be submitted,—is that the best method of attaining it? I will venture to say it is not, inasmuch as there appears no necessity "to tire the arms at a frame level with the breast," when the same

* Mr. C. Stower's Printers' Grammar, p. 142.

amount of determination to stand straight, as is necessary to endure the toil of indirectly forcing it, will not only avoid round shoulders, but will better qualify a compositor to work quicker and longer. High frames may, indeed, be of service to defective eyes, but such is the exception, not the rule.

At a frame adjusted an inch or so higher than the elbow, a compositor may keep his composing-stick within an inch or two off his right hand over any part of his case, without tiring either his arms or his body by raising his elbows higher than their natural position. Indeed, when composing, the closer the elbows are kept to the body the better, both for expedition and ease. In putting the type into the stick, then, use the wrist joint; there is no necessity to use the elbow-joint, except when the right hand, which the stick should follow to every box, is engaged at the upper case, or in those boxes of the lower case furthest out of reach.

Another thing, equally important to a quick compositor and which equally requires his attention, is, that every type be lifted and put into the composing-stick by the first attempt. The time lost by compositors missing the letter they intended to raise, and trying twice, and even thrice, before they get hold of it, is incalculable. This must, by all means, be avoided; and that it may effectually be so, I would suggest the following method:—first, let the letter on which the eye first rests be picked up and secured in the fingers, before the eye moves to another box. Second, let the eye be fixed on the second letter while the right hand is bringing home the first; and fix it on the third while conveying the second, and so on. Again, let the time of picking up a letter be equal to the time of counting two, and bringing it to the stick equal to one, counted at the same rate. If a compositor would extend his hand as if composing, and hold it so while he counts two, and again bring it back in the time he would count one, the movement that I would explain and recommend as the best to secure lifting up every type, would, perhaps, be better understood. Thus, it will be seen, that, to avoid missing any type, when the

attempt is made to pick it up, considerably the largest portion of the time of composing is occupied in securing it. It is immaterial at what rate the movement be tested; it will be the same relatively. This method of composing, once acquired, will doubly compensate for the trouble of learning it.

When composing, take as much copy in the mind only as convenient. Certainly, more the better; but it is best to take only half a line with certainty than a whole line with perplexity. Perhaps the best time for taking copy in the mind is when inserting the last space in the preceding sentence, or when putting in the last space to justify the line.

The thick and middling spaces being mixed, add, in justifying, a thin space to the middle one; and, if necessary to space out further, let it be between such words as begin with j or end with f, and after the points.

With clean cases, and proper attention to copy in composing each word, there will be no necessity to read every line in the stick; but let it be remembered, that these are the only conditions upon which it can be dispensed with. Matter out of foul cases should be read over while the line is being justified; but when such a necessity exists, the compositor himself must decide. In

TAKING COPY,

The only thing that can be useful is the knowledge of the peculiarity of the style adopted; and to know in what instance, and in what type, to set a general, special, or particular head-line. This, however, can only be known from the Overseer, upon whose taste and judgment this and other details of the office devolve. The same taste must also decide what method must be followed in setting the side heads to the various local, provincial, and other miscellaneous paragraphs; as well as what method should be followed in the use of capitals, and the particular manner of setting the advertisements. As all these things are mere

matters of taste, there is no difficulty in accounting for some newspapers having their special and particular heads set in capitals and small capitals, in separate lines, while others have them set in the same sorts but as side-heads. Some, again, prefer their side-heads in italic, while the majority of others use small capitals.

Whether the matter in hand should be joined up on one galley or emptied separate must, of course, depend upon the judgment of the overseer, who having an eye to the making-up, has every stickful emptied where it will best forward it. Due attention to this, not only materially reduces the labour of making-up, but the necessity of transposing matter is altogether avoided.

To make even, which is always, more or less, adopted on every newspaper "at the finish," ascertain from the first in copy how many lines of manuscript make even lines of matter, and take copy accordingly. For instance, if four lines of copy make three lines of matter, take four, eight, twelve, sixteen, twenty lines, &c., according to circumstances. By doing so, you may make even without being forced, like some of the London newspaper hands, to space with two em quadrats.

## CORRECTING.

Though correcting is itself an evil, and should, as much as possible, be dispensed with, yet, until the causes which require it be removed, it must remain an indispensable part of a compositor's duty. The time thus occupied, being, under certain circumstances, lost, it is the more desirable that every minute which can, should be saved. This, indeed, is all that is required of any workman; but it is he who can save the most who is deemed the best. To attain this, however, requires an effort, the success of which must depend upon the facility and energy employed. Every hint, therefore, that tends to save time, must be acted upon, and, if possible, improved, as well in correcting as in any other operation.

In this view, reason suggests that the matter on galleys be corrected at the frame, the facilities there being much greater than at the stone. The galley secured, set all the corrections in the stick at once, that they may serve as a check in correcting, and supersede the necessity of revising in the metal. The corrections thus got in the first instance agreeing with those made in the second, is a sufficient test to justify a compositor believing all corrected. Holding the corrections in the left hand, raise the first correction marked, and while the hands are employed in making it, find the next, that the hands may not be idle while it is looked for. When that, again, is nearly done, find another, and keep the hands continually doing, till the proof is finished. This is the only way to correct expeditiously or satisfactorily. All the literals being thus corrected, attend to the transpositions; after which to the doubles and outs. The advantage of this arrangement is, that the matter being thus corrected the mind avoids the confusion consequent upon getting-in and over-running matter which contains literals, transpositions, or doubles. When the attention is divided, it is impossible to correct with certainty. It is he only who attends to one thing at once, who gets on the quickest and the safest.

### MAKING-UP,

Which begins the day before publication, is the act of arranging the matter in a comprehensive form, and includes the successive order of the general head-lines, as well as the particular place of every subject and paragraph under them. The nature and number of the general standing heads must, of course, depend on the judgment of the editor, by whom they are filled up; but to see that every portion of information supplied be inserted under its own peculiar head, is the duty of the maker-up. To do this, however, easily, certainly, and expeditiously, requires some experience, though a good system would greatly obviate those inconveniences by which every new beginner, more or less, is surrounded.

The first and principal essential to making-up well, is a perfect knowledge of the several divisions into which a paper

is divided, and the particular class of subjects included in each. The number of these divisions, in a well made-up paper, appears to be six, viz.:—

I.—DOMESTIC, in its most comprehensive sense, as applied to Great Britain as a Nation;

II.—FOREIGN AND COLONIAL;

III.—GENERAL AND MISCELLANEOUS;

IV.—EDITORIAL;

V.—CORRESPONDENCE; and

VI.—ADVERTISEMENTS;

each of which again embraces several less-general heads.

I.—DOMESTIC comprehends everything connected with the State and Nation, and includes *Politics* and *History*.

Under *Politics* come the administration of Public Affairs by the Executive Government, Parliamentary Intelligence, Public Political Meetings, &c., &c.

*History* comprises accounts of Facts and Events; Transactions with other Nations; State of Trade; Agricultural, Manufactural, and Commercial Intelligence; Ship-news; Imports; Exports; Markets; London Gazettes; Assize Intelligence; Superior and Local Courts of Law; Local and Provincial Intelligence; Reports of Public Meetings; Coroners' Inquests; Fashions; Births, Marriages, and Deaths, &c.

It may be observed, that though Domestic embraces the various subjects enumerated, it is never used as a head-line only in a much more limited sense. The same may be said, also, of Politics and History. Not being used, however, does not alter the several special heads under them, or remove the necessity of knowing the genus under which they are classed. Such knowledge greatly assists the judgment of the maker-up.

II.—FOREIGN AND COLONIAL, though an important feature in a public journal, the subjects connected with it do not furnish matter sufficiently interesting to call for many additional heads. The mere name of the nation to which the intelligence refers, is generally found adequate for all practical purposes; and unless singularly interesting, all the news given under France, Spain, Portugal, America, &c.,

seldom occupies above a column or so. In making up the matter, therefore, for this portion of the paper, it is hardly possible to err.

III.—General and Miscellaneous articles comprehend such subjects as are equally interesting and important to all nations: such as Arts and Sciences; Reports of Scientific Experiments; Literature, and Notices of New Works; Poetry; The Drama; Natural Phœnomena; Natural Philosophy; Men and Manners; Chit Chat; Varieties, &c., &c.

IV.—Editorial articles, which include Notices to Correspondents, require but little notice, inasmuch as these articles, being leaded, sufficiently indicate that portion of the paper to which they belong. The name of the paper and date is the only general head used, except, indeed, those particular heads which specify the subjects on which the editor remarks.

V.—Correspondence. The special heads under this, must depend upon the nature of the subjects under it. To speculate, therefore, what they might be, is unnecessary.

VI.—Advertisements*, arranged under the following heads; namely, Public Amusements; Charitable Institutions; Education; Contracts; Trade Advertisements; Travelling; Medical; Perfumery; &c., &c.

These divisions and sub-divisions of a newspaper being perfectly understood, the next important requisite for making it up is, to know their successive order, in what page and where each description of matter should be inserted. This being mere matter of opinion, and subject to no definite rule, each must exercise his own judgment in deciding which is the best place for any particular species of matter. In suggesting, therefore, the best places for the numerous subdivisions into which newspaper matter is divided, my opinion must be understood rather how a paper should be made-up than an attempt to explain how it is.

* Note.—The word "Advertisements" is never used as a general head-line in a newspaper. The matter belonging to it being classed under special heads, like the matter under Politics and History, it is deemed unnecessary.

Presuming those general and special heads before enumerated to be correct, the inquiry is, which of the divisions should occupy the first page; supposing the paper to be a quarto, and each page containing five columns. The answer is, Advertisements, because they are the least interesting to the majority of purchasers, and because that page is more liable to be soiled, from the circumstance of it being outside and serving as a cover. For the same reason, I would, also, when necessary, devote the eighth, or last, page to the same description of matter. The first and last pages being so occupied would serve purchasers. Advertisers would be served by their favours thus appearing conspicuous.

The second, third, and part of the fourth page, might be devoted to Domestic, because this embraces the largest number of special heads, and is the most important to the politician and general reader; and because the largest quantity may be inserted in these three pages without being divided. It is in this division that the discussions in both houses of parliament and every event of the day is recorded. Another advantage of this arrangement is, that, the inner forme of a quarto paper being worked first, which contains the second and third pages, it leaves the fourth page open for any important information that may arrive by the last mail; and that, too, without dividing it from its own general head. The second page, then, and as much of the third as necessary, occupy with Politics; the remainder of the third and part of the fourth with History.

In the last column or column and a half of the fourth page, insert Foreign and Colonial, which would also be left open for the latest news under that head brought by the last mail.

Editorial articles would occupy as much of the fifth page as necessary. If any space remained, fill up with Letters of Correspondents, because this description of matter may at any time be omitted, to make room for any unforeseen emergency.

Continue Correspondence on the sixth page, and fill up with General and Miscellaneous articles.

Fill up as much of the first column of the seventh page as required with Poetry. In the last two columns of this page,

or as much as necessary, insert the Bankrupts and Market tables, not because this is the most proper place for them, but because it is the most convenient, inasmuch as, if there, they will be less liable to interfere with other matter. Besides, always being in one place will, in referring, save the trouble that would arise from a promiscuous insertion.

If any part of the eighth page remain unoccupied after the advertisements are made up, fill up with General and Miscellaneous articles, puffs, &c., &c.

This knowledge being so acquired as to be comprehended in one view, another essential in making-up is the ability to arrange, without confusion, every subject and paragraph under their proper heads. Many, indeed, may do this, if unlimited to time, but to do it with facility is an attainment only acquired by system. The nature of the work requires it to be done in the least possible time; and he who requires more than sufficient, is deemed unfit to be employed in this part of the profession. Saving time, indeed, is so essential in making-up, that any system which saves the most and transposes the least, is deemed the best. Whether this object be better attained by making-up on galleys or on the stone, is left to those to determine who may try both; it is only necessary at present to observe, that reason, at least, appears to prefer the first, if worked out on the following system.

Let every special description of matter, if possible, occupy a separate galley; or if that be not practicable, let as many of the principal heads as can be separate, and some of the minor heads, and matter under them, be on one. But let us imagine ourselves in a newspaper office, where five or six hands are employed, and all hands ready to take copy; and also that the editor, who always gives out copy sparingly in beginning to compose, has given in copy which consists, say of Parliamentary, Local Courts of Law, Public Meetings, Births, Marriages, and Deaths, London Gazettes, &c.

The first-named copy being political, will, of course, according to the preceding arrangement, come on the second page. In giving out this, then, get the general head—"Parliamentary,"—the special head—"House of Lords,"—the day

and date,—and the particular head, which is always the subject of discussion,—and put them on the galley intended for the matter. Get another galley, also, for the "House of Commons," &c., which, though belonging to the same general head, requires a separate galley, until it is ascertained what quantity of matter there is under each head.

The other pieces of copy belong to Historical, and will, therefore, follow, though perhaps not immediately, the political matter on the third page.

The Local Courts of Law may consist of sessional matter &c. Set, therefore, the special head and date, and empty on a separate galley. Do the same with the other copy, and there need not be any confusion in making-up.

If the number of galleys be too small to allow a galley for each head, select two heads likely to follow, which generally have but a small portion of matter under each. For instance, Local and Provincial intelligence might sometimes come on one galley; Coroners' Inquests and Births, Marriages, and Deaths, on another; and The Court and Fashions on a third.

Pursuing the same system throughout the week, empty every succeeding piece of matter on the galley containing the same description. This will enable the maker-up to see at a glance what quantity of matter there is under each head, and assist him in making-up accordingly.

The day before publication, the matter for the second, third, sixth, and seventh pages, which constitute the Inner Forme, is made-up into columns, (a column-rule being the gauge,) and slided on the stone.

Second Page.—Beginning with the first column of this page, the matter under House of Lords, perhaps, makes a column and a half; add, then, the first part of "House of Commons" matter, and make out two columns. Any hand out of copy or waiting, may put a column-rule against the matter on each galley made-up, tie them up, and slide them off. Make up the remainder of Commons into columns, tie up, and slide off in the same manner. This matter altogether, may, perhaps, make five or six columns; say five

columns and a half. Five columns being the width of the page, this will complete the second page, and leave half a column for the third.

Third Page.—If there be any more matter of a political nature, insert it after Parliamentary, and make out the first column of this page. If possible, begin the second column with any report of Parliamentary Commissions, or with Manufactural or Agricultural Intelligence. This may make, more or less, two columns. Make up the other two columns with the most important matter of Local Courts of Law, State of Trade, Local Paragraphs, Coroners' Inquests, or Births, Marriages, and Deaths.

Sixth Page.—Insert in the first column and half of this page the most important Letters from Correspondents, leaving the less important to go into the last column of the fifth page, in the outer forme, should that space not be required for better matter. Fill up the second column with Notices of New Works. Begin the third column with any Report of Scientific Experiments, or with anything relating to the Arts and Sciences, and continue to the end of this page with the Drama, Natural Philosophy, Natural Phenomena, &c.

Seventh Page.—Continue General and Miscellaneous articles, beginning the first column with Poetry, which may be made out with Literary paragraphs. Let the second and third column of this page be occupied with Men and Manners, Chit Chat, Varieties, &c., &c. Top of the fourth column insert Bankrupts, follow with Arrivals and Departures of Railways, and fill up with Market Tables.

For an abstract of the Inner Forme see page 27.

The inner forme being at press, the matter measured off, and the quantity wanted for the outer forme ascertained, all hands, if the paper advertises well, are then employed in getting up the remainder of the advertisements,—editorial articles,—and the latest news, local and provincial. These proved, read, and corrected, the making-up again proceeds. The labour of classifying the advertisements would be much reduced, if they were sorted before they were given out, and emptied under their respective special heads on one or more galleys.

First Page.—Advertisements.—In making up the advertisements, begin the first column with those of the most general character; for instance, Public Amusements, namely, Theatricals,—Concerts,—Exhibitions,—Public Dinners, &c. Begin the second column with those of Charitable Institutions and such as relate to Education. Fill the third column with Contracts, Trade Advertisements, or Insurance Notices. The fourth column begin, and fill up to the end of the fifth, with Sailing Vessels or Steam Packets, or Public Notices and Meetings.

Fourth Page.—Begin the first column with Reports of Public Meetings, continue with Local and Provincial Intelligence, and fill up with Ship News, Imports and Exports. This may make, more or less, three columns. Let the Fashions precede, in the fourth column, Local Paragraphs, and continue to the end of this page with Foreign and Colonial. Should the last mail bring important news, the editor will point out what must make room for it.

Fifth Page.—If there be more advertisements than will fill the first and eighth pages, the remainder may be inserted in the first column of this page; after which follow with Notices to Correspondents. Let the Leaders follow on to the fourth column, at the bottom of which insert the "Postscript" and "Latest News." If the fifth column cannot be better employed, begin and fill it up with Correspondence. This making-up will always provide space for important news, at the latest hour.

Eighth Page.—Advertisements.—Insert in the first column, To be Let,—To be Sold or Let,—or for Sale by Private Treaty,—and fill up this column with miscellaneous advertisements. At the top of the second column begin To be Sold by Auction, which class according to date:—This day,—To-morrow,—This week.—Next week. Follow on the third, fourth, and fifth columns with New Publications, —Periodical Literature,—General Literature,—Travelling, —Medical,—Perfumery, &c., making up the fifth column of this page with the Imprint.

For an abstract of the Outer Forme see page 26.

OUTER FORME OF A QUARTO NEWSPAPER.

| PAGE. 4 | PAGE. 1 |
|---|---|
| Reports of Public Meetings. | Advertisements.—To be Let,—To be Sold or Let,—or for Sale by Private Treaty,—and miscellaneous advertisements. |
| Reports, &c. \| Local and Provincial Intelligence. | To be Sold by Auction.—This day,—To-morrow,—This week,—Next week. |
| Ship News,—Imports,—Exports. | New Publications,—Periodical Literature. |
| Fashions. \| Local Paragraphs. | General Literature,—Medical. |
| Foreign and Colonial. | Travelling.—Perfumery. \| Imprint. |
| Advertisements. Wanted. \| Notices to Correspondents. \| Editorial articles, leaded. | Public Amusements.—Theatricals.—Concerts,—Exhibitions,—Public Dinners. |
| Editorial articles. | Charitable Institutions, and such as relate to Education. |
| Editorial articles. | Contracts and Trade Advertisements,—Insurance Notices, &c. |
| Editorial articles. \| Postscript and Latest News. | Sailing Vessels, Steam Packets, &c. |
| Letters from Correspondents. | Steam Packets,—Public Notices and Meetings. |
| PAGE. 2 | PAGE. 3 |

## INNER FORME OF A QUARTO NEWSPAPER.

| PAGE. 2 | | PAGE. 3 | | PAGE. 6 | | PAGE. 7 | |
|---|---|---|---|---|---|---|---|
| Parliamentary. House of Lords. | | House of Commons. | Political matter—Electioneering or Party Gossip. | Most important Letters from Correspondents. | | Poetry. | Literary Paragraphs. |
| House of Lords. | House of Commons. | Report of Parliamentary Commissions, or Manufactural and Agricultural Intelligence. | | Letters from Correspondents. | Notices of New Works. | Men and Manners.—Chit Chat. | |
| House of Commons. | | Do. Do. Do. | | Reports of Scientific Experiments, or any thing relating to the Arts and Sciences. | | Varieties, &c., &c. | |
| Do. Do. Do. | | Local Courts of Law.—State of Trade.—Local Paragraphs. | | Reports, &c., Arts and Sciences. | The Drama. | Bankrupts. | Arrivals and Departures of Railways. |
| Do. Do. Do. | | Local Paragraphs,—Coroners' Inquests,—or Births, Marriages, and Deaths. | | Natural Phenomena,—Natural Philosophy. | | Market Tables. | |

4 PAGE.

| Poetry. | Literary paragraphs,—Notices of New Works, &c. |
|---|---|

Reports of Scientific Experiments, &c.

| General matter, relating to the Arts and Sciences, &c. | The Drama, or Natural Phenomena. |
|---|---|

Natural Philosophy.

Men and Manners,—Chit Chat, &c. &c.

Varieties, &c.

| Advertisements.—Wanted, &c. | Railway arrivals and departures. | Tide Table. | Imprint. |
|---|---|---|---|

1 PAGE.

Advertisements.—Public Amusements,—Theatricals,—Exhibitions,—Public Dinners,—Charitable Institutions.

Education,—Contracts,—Trade Advertisements.

Public Notices and Meetings,—Insurance Notices, &c.

Travelling.—Sailing Vessels,—Steam Packets,—Railway, &c.

To be Let,—To be Sold or Let,—For Sale by Private Treaty, &c.

To be Sold by Auction, arranged—This Day,—To-morrow,—This Week,—Next Week, &c.

New Publications.—Periodical Literature,—General Literature,—Medical,—Perfumery, &c.

OUTER FORME OF A FOLIO NEWSPAPER.

## INNER FORME OF A FOLIO NEWSPAPER.

PAGE 2

| | |
|---|---|
| Parliamentary:—House of Lords. | House of Commons. |
| House of Commons. | |
| House of Commons. | Political matter,—Electioneering,—Party Gossip. |
| Report of Parliamentary Commissions,—or Manufactural and Agricultural Intelligence, &c. | |
| Roports of Public Meetings,—or Local and Provincial Intelligence, &c. | |
| State of Trade,—Local Courts of Law,—Local paragraphs. | |
| Local Paragraphs,—Coroners' Inquests,—Births, Marriages, and Deaths, &c. | |

PAGE 3

| | | |
|---|---|---|
| Ship News,—Imports,—Exports, &c. | | |
| The Court and Fashions. | Foreign and Colonial. | |
| Advertisements—too late for the first forme. | Notices to Correspondents. | Editorial articles, leaded. |
| Editorial articles. | | |
| Latest News,—Postscript, &c. | Letters from Correspondents. | |
| Letters from Correspondents. | | Bankrupts, &c. |
| Market Tables, &c. | | |

PAGE 4

The outer forme being nearly ready, all hands, except those required for press, leave. If there be a "second edition" wanted, some of those leaving first return the following day for that purpose. If no "second edition," nor a jobbing-office attached, it is not usual for the hands to return, on a weekly newspaper, till the day after publication, when distribution again commences.

For a folio newspaper, the same general divisions are still applicable, the only difference between this and a quarto being merely in the size and number of the pages; a folio paper having only four pages, while a quarto has eight. Hence it may be proper to notice the special difference in the making-up. Observing, then, the same general arrangement as before recommended for a quarto, a well made-up folio paper would, perhaps, be according to the following plan, namely:—

First Page.—Advertisements; and, if necessary, part of Domestic.

Second Page.—Domestic continued; continuing the first column with *Politics*, and following with *History*.

Third Page.—Foreign and Colonial; Advertisements that come too late for the first forme. Editorial Articles; Correspondence; occupying the last column with Market Tables.

Fourth Page.—General and Miscellaneous, &c. &c. Advertisements, if necessary.

For the various special heads into which these general heads are divided, see pages 19 and 20.

The outer forme of a folio newspaper being always worked first, this arrangement still preserves space, in the inner or last forme, which contains the second and third pages, for any unforeseen emergency.

For an abstract of a Folio Paper see pages 28 and 29.

### CASTING OFF MATTER.

To ascertain how many thousand letters there are in any piece of matter, measure the width by the body of the letter in which the matter is set. Thus, suppose the matter to be

cast-up be minion, ascertain how many ems minion will come in the width. This done, multiply it by two, which will give the average thickness of each letter and the number of ens in a line. If there be a thick space above the even ems it is counted an en; if less than that it is not reckoned. If the matter be solid count, if leaded measure, the number of lines to be cast off, and multiply them by the number of ens in the width; the total will be the number of thousands sought. For instance, this page, being set in brevier, contains twenty-six ems, or fifty-two ens, in width, and forty-nine lines in length. These, multiplied together, give two thousand five hundred and forty-eight letters, including, as is usual, the head and signature lines; exhibited in figures thus:—

| | | |
|---|---|---|
| Width of page | 52 | ens. |
| Length „ | 49 | lines. |
| | 468 | |
| | 208 | |
| | 2548 | letters in a page. |

Whether a piece of matter be forty-nine, two hundred, or any other number of lines long, the same principle gives the exact number required. For, to know how many thousands there are in a sheet of this work, being foolscap octavo, it is only necessary to multiply the number of pages contained therein with the number of letters in a page, and the total is the number sought. Thus:—

| | |
|---|---|
| 2548 | letters in a page. |
| 16 | pages in a sheet. |
| 15288 | |
| 2548 | |
| 40,768 | letters in a sheet. |

It being usual to consider and reckon a remaining five hundred letters as a thousand, the above number would be charged as forty-one thousand; and this, by the Liverpool piece work prices for news-work, annexed, at sixpence halfpenny a thousand, would come to £1. 2s. 2½d.

LONDON NEWS-WORK PRICES.

| | Per Week. | Per Galley. | Per Hour. |
|---|---|---|---|
| Morning Papers.. | £2. 8s. 0d. | 3s. 10d. | 11½d. |
| Evening Papers .. | £2. 3s. 6d. | 3s. 7d. | 10½d. |

The charge of tenpence halfpenny per hour refers solely to employment upon time; every odd quarter of a galley, on quantity, must carry the charge of eleven-pence, as the charge of tenpence halfpenny would bring down the galley to three shillings and sixpence, which is contrary to the scale.

Assistants on other journals are paid the same as evening papers; the Sunday papers, having their galleys of various lengths, are paid at the rate of eightpence halfpenny a thousand, or tenpence an hour.

The only meaning that can be gathered from the first part of this article is, that papers which are published twice or three times a week are paid the same as evening papers. With respect to the second part, the price per thousand for a Sunday or weekly paper is the same, but time-work is paid only tenpence an hour.

Long primer and minion galleys, cast as nigh five thousand letters as possible (at present varying from that number to five thousand two hundred, partly arising from a variation in the founders' standard) are per thousand, on

| | Morning. | Evening. |
|---|---|---|
| Long Primer and Minion .... | 9d. | 8½d. |
| Nonpareil .... | 10d. | 9½d. |
| Pearl .... | 11d. | 10½d. |

Or a reduction, in proportion to value, on the galley matter.

Apprentices are not permitted to work on daily papers whether stamped or unstamped.

Compositors on weekly papers, when employed on time, charge one hour for every portion of an hour.

Compositors called in to assist on weekly papers are entitled to charge not less than two hours if employed on time, or less than half a galley if paid by lines; and persons regularly employed in a house where a weekly paper is done, if required to leave their ordinary work to assist on the paper, are entitled to not less than a quarter of a galley or an hour for each time of being called on.

The method of charging column work upon newspapers is as follows: half measure is charged one-third more, third measure is charged one-half, and four column measure is charged double.

One-fourth is allowed for distribution on weekly papers when more than one galley has been composed; but if less than a galley, no deduction is made.

### LIVERPOOL NEWS-WORK PRICES.

Nonpareil-minion to be cast up as Minion in depth and Nonpareil in width; and the following prices charged for composition; namely,

| | | |
|---|---|---|
| For Bourgeois and Brevier ..... | 6½d. | a thousand |
| Minion and Nonpareil-minion.. | 7d. | „ |
| Nonpareil ..... | 8d. | „ |

These charges are for newspapers printed once a-week; those printed oftener to be charged according to the London scale for newspapers on piece.

For matter requiring alteration, if the alteration be slight, one-third to be charged; if considerable, to be paid for as new composition.

Pressmen to be paid one shilling a token on piece-work.

One shilling to be charged as night-money on newspapers, on established wages, published once a-week; one shilling and sixpence on those twice a-week; two shillings on those three times a week; and two shillings and sixpence on all published oftener.

## CHAP. II.

## JOB-WORK.

TASTE IN DISPLAY NOT FIXED.—PROPRIETY, WHAT CONSTITUTES.—CARDS AND CIRCULARS.—HAND BILLS AND POSTERS.—TABLE-WORK, ETC.

Having endeavoured to explain the best means of acquiring respectability as a news-hand, I will, with the same view, offer some observations on Jobbing. In doing so, however, I am not unaware of the difficulty. Taste and judgment so thoroughly pervades this department of case, that unless they were subject to some definite laws, it is impossible to fix any universal standard. What one regards as neat, another views as indifferent, or even as bad. Besides, even though a workman possess, in a high degree, the power at all times of discerning the propriety of display, it is not always that an employer will forego exercising his judgment, in making such improvements as the peculiarity of his taste may suggest. If he be practically acquainted with the profession, certainly, little or no evil can arise from his interference, because he will be as likely to know as his workmen those principles which fix the propriety of display. But it is from employers unacquainted with the business exercising their authority indiscriminately that propriety is often sacrificed, and the taste and judgment of even the best practical workmen are thwarted. Such, however, will not justify young workmen neglecting to cultivate either one or the other; for though an employer may alter the work in hand, the workman, with taste, may so modify the alterations as to be but little detriment in appearance.

In this part of jobbing, then, it can hardly be deemed possible to define what is the real standard of excellence;

nor, indeed, is it necessary, my object being more to assist in the mechanical than in the intellectual department of the profession. On this point, therefore, I will only add, that he who would cultivate his taste in display must observe and learn for himself what combinations, not only of the various sizes but also of the several descriptions of types, produce the neatest and happiest effect. His own judgment must be his guide.

Propriety of display is another thing which every jobber should attain, and this depends more upon the exercise of the understanding than it does upon taste; for a job may be very tastily done, and yet exhibit absurdities. But the rule which guides it, being simple and easily learned, requires but little comment. It will be sufficient to observe, that propriety makes all the principal lines subservient to the object for which the job is printed, and applies as well to cards and circulars as to hand-bills and posters. But, perhaps, I may be better understood if I say that those lines only should be principals which will read and make known the object, independent of every other line. It is ability to do this readily, united with taste, that makes a good jobbing hand, even though he be only an average hand at composing.

Though there are a great variety of jobs, it is only necessary to notice a few, inasmuch as the same principle is applicable to many. First, then, as to

### CARDS AND CIRCULARS.

As this description of work is always required to be done neat, the principle upon which cards and circulars are set is, that each line shall so correspond in size and length as to give the best effect in the lightest form. Hence so many proportions of thin face and hair-line types, and the reason for inserting, at times, thin, middle, and thick spaces between every letter in the line. Of course, the same principle will govern every other description of jobs characterized as neat. The name and trade, or occupation, con-

stitute in these the principal lines, for which nothing larger than pica should be used. In running on matter, the lighter it is set and the better. When borders round the job would improve its appearance, taste only can decide.

HAND-BILLS AND POSTERS

Belong to a rougher description of work, in which neatness yields to propriety and taste to effect. In hand-bills and posters, the large lines are made to read on with each other, so that the substance may be read at a glance. Any other particulars are only considered secondary lines, and are set small or large, according to their apparent import. Catch lines, which are merely used to connect one line with another, are always set small, in capitals or small capitals. The following advertisement will perhaps illustrate the principle.

**TO BE SOLD,**

BY PRIVATE TREATY,

A BEAUTIFUL FOUR-WHEELED

# PHAETON,

A FINE WELL-BRED

***MARE,***

About 14½ hands high, warranted sound,
is very steady, and trots very fast,

AND

HARNESS COMPLETE.

---

Apply at, &c., &c.

In the above example, To be Sold—Phaeton—Mare—and Harness Complete, are principal lines, and would be perfectly understood without any other word; hence they are the largest, that they may be readily seen. By Private Treaty—About fourteen and a half hands high, &c.—are secondary lines, or what would only be looked for if there *were any desire to* purchase. A beautiful four-wheeled—

a fine well-bred—and—are catch-lines, because they are merely used to connect the lines and to make them read smoothly. Apply, &c.—partakes more of the nature of a note, and hence the reason for being always cut off with a rule, and run on in smaller type. It is of little consequence what may be the size of the bill, whether for the hand or the wall, the *principle* which points out the leading and secondary lines is still the same.

In setting bills, then, set the principal lines first, that the effect may be judged of, and the remaining space for the other lines may be determined. After which fill up the bill in hand with its secondary and catch lines. By doing so, the necessity for altering lines to get in, may be avoided. If you would set a bill expeditiously, determine *at once* what letter will do for *the* line wanted, and avoid, by all means, setting the line again. It is unnecessary, and often consumes more time than would be required to set the bill twice over. Altering one line often requires an alteration of another, or two, which after all may make the bill no better than at first. This is the principal secret of setting a bill quick, and not picking up a great number of letters in a little time, though this, indeed, may facilitate it.

### TABLE WORK

Includes every description of rule-work, whether the space between the rules contains matter or not, and comprehends all that is distinguished in the trade by rule-work, tabular, or tables. This is the most difficult description of work, inasmuch as every job belonging to it requires great accuracy, both in the length of rules and in justifying. So much so, indeed, that the time which such-like jobs consume, is considered worth double the amount of common matter, and is paid for accordingly. There is, however, a great difference in the method of setting this description of work; but I will confine myself to that method which I think is not generally known, and which appears to save the most time. In this *system all* the columns are set across, instead, as is usual, of

being set down in single columns, and the setting-rule is used as in news matter. It is applicable to any and every description of matter, and the most complicated tables may be set up, continued on one galley, and made-up like common matter. The column-rules being inserted afterwards, the pages can be made up into equal lengths, whatever doubles there may be in each column, without the possibility of mistake, or cutting the rule into wrong lengths. That it may, however, be clearly understood, I will endeavour to elucidate it by examples.

Let the job consist of five columns, with four down-rules, and two cross-rules. The size, say demy octavo; the matter, a return of convicts. Allowing twenty-four ems pica as the width of the page, the first column would be nearly six ems, the second column one em, the third column six ems, the fourth column five ems, and fifth column six ems. Instead of setting it in single columns, make up the stick to the thickness of two rules short of thirteen ems, that the three first columns may be set in one measure. To do this, set the name and age in the first and second columns, and justify against a six em lead; after which take away the lead and set the third column in that space. If the third column double, every line of quadrats in the first two columns which is to correspond with such double justify, also, against the same lead, and set the double accordingly. Be careful, however, to leave an em quadrat at the end of each white, for the second column. The first three columns of copy being completed, again make up the measure to the thickness of two rules short of eleven ems, for the fourth and fifth columns. These, of course, will be set in the same way, and will differ in nothing except the nature of the matter and the width of the measure in which it is set. It is hardly necessary to say, that, in setting the whites for the doubles in these cols., the em quadrat necessary for the other columns may be dispensed with. Proceeding with these two columns, put a rule, no matter the length, down the matter of the first three columns, as in the subjoined example, and empty *in a line with them*. Justify carefully, and continue thus

until these columns also are finished. The matter composed and emptied accordingly, will then be exactly four rules short of twenty-four ems, and will appear thus:—

| NAME. | AGE. | OFFENCE. | WHERE COMMITTED. | SENTENCE. |
|---|---|---|---|---|
| William Tomlinson | 18 | Breaking into a dwelling house & stealing several articles of wearing apparel .... | At Gisboutne, in the County of York ..... | Committed to York Castle for 12 months |
| Thomas Johnson .... | 30 | Larceny from the person ..... | Settle, in the County ..... | Imprisoned 3 months, last week to be in solitary confinement and whipped |
| James Williams, alias Thornton, (second conviction)..... | 41 | Stealing 14 sovereigns, 5 shillings and 4 sixpences | City of York ... | Transported for 14 years |
| Andrew Kershaw and | 45 | Assaulting with intent to rob .... | On the King's highway, near Todmorden.... | Impr. 2 years, hard labour, to be once whipped. |
| William Winstanley | 39 | | Halifax, in York-shire..... | Impr. 1 month, hard labour, last week in solitary confinement |
| Joseph Place, alias Jackson ..... | 15 | Stealing 5 shillings in silver from his employer ..... | Bury, in the County of Lancaster | Impr. for 12 months, and twice whipped. |
| Adam Henderson .... | 27 | Assault and robbery | | |

In proceeding to make it up, set up in the first measure, and justify against the six em lead as before, as many quadrat lines as there are doubles in the fourth and fifth columns. *Also, as* many quadrat lines for the fourth and fifth columns

as there are doubles in the first and third columns. Of course, those lines which double in the first and fourth columns, or in the third and fifth, will not require white lines, because they are already justified in their respective columns. Put in the whites, then, and make every name read to its own line in each column. This done, take out the rule dividing the two measures used for the convenience of putting in the white-lines, and the matter will be like any other matter set in one stick. It is now ready for rules, and will stand thus:—

| NAME. | Age. | OFFENCE. | WHERE COMMITTED. | SENTENCE. |
|---|---|---|---|---|
| William Tomlinson | 18 | Breaking into dwelling house, and stealing several articles of wearing apparel .... | At Gisbourne, in the County of York .... | Committed to York Castle for 12 months. |
| Thomas Johnson .... | 30 | Larceny from the person ..... | Settle, in the same County | Impr. 3 months, the last week to be in solitary confinement. |
| James Williams, alias Thornton, (second conviction)..... | 41 | Stealing 14 sovereigns, 5 shillings and 4 sixpences . | City of York.. | Transported for 14 years. |
| Andrew Kershaw and William Winstanley | 45 39 | Assaulting with intent to rob .... | On the King's highway, nr. Todmorden | Impr. for 2 years hard labour & be once whipped each. |
| Joseph Place, alias Jackson ..... | 15 | Stealing 5 shillings in silver from his employer ..... | Halifax, in Yorkshire .. | Impr. 1 month, hard labour. |
| Adam Henderson .. | 27 | Assault and robbery ..... | Bury, in the County of Lancaster .. | Impr. 12 months and to be once whipped. |

The length of the page being decided, get the rules. Put a piece of furniture against the matter and place the galley, with its head next the body, on the lower-case. The point of a bodkin put in between the columns, at the head, and opened a little, the rules which divide the columns may be inserted as easily and as soon as so many leads could be in ordinary matter. If the matter in the columns, when made up, be too near the rules, a lead may also be put in, to separate them, without any inconvenience. With the rules in, the matter would then be finished, thus:—

| NAME. | Age. | OFFENCE. | WHERE COMMITTED. | SENTENCE. |
|---|---|---|---|---|
| William Tomlinson | 18 | Breaking into dwelling house, and stealing several articles of wearing apparel .... | At Gisbourne, in the County of York.. | Committed to York Castle for 12 months. |
| Thomas Johnson .... | 30 | Larceny from the person ..... | Settle, in the same county | Impr. 3 months, the last week to be in solitary confinement. |
| James Williams, alias Thornton, (second conviction)..... | 41 | Stealing 14 sovereigns, 5 shillings and 4 sixpences.. | City of York | Transported for 14 years. |
| Andrew Kershaw and William Winstanley | 45<br>39 | Assaulting with intent to rob..... | On the King's highway, nr Todmorden | Impr. for 2 years hard labour & be once whipped each. |
| Joseph Place, alias Jackson ..... | 15 | Stealing 5 shillings in silver from his employer ..... | Halifax, in Yorkshire | Impr. 1 month, hard labour. |
| Adam Henderson.... | 27 | Assault and robbery ..... | Bury, in the County of Lancaster | Impr. 12 months and to be once whipped. |

If a job of this description be required in haste, that object will be attained by cutting the copy, and giving the first side to one hand and the second to another, and emptying on one galley, as before advised. It should, however, be observed, that a line of the matter, in putting in the white lines and making up, should be read across occasionally, to be sure that every column is right, before the rules go in.

If the job in hand be one of more columns than the preceding example, it must be left to the discretion of the workman into how many measures it be divided. My opinion is that the more equally it is divided and the better, both for convenience and expedition. For instance, a table of six columns would be better divided into two measures of three columns each, if the columns be not too wide to make the measure inconvenient, than into three measures of two columns. It would be more simple, and therefore not so liable to confuse. If, however, the job consist of ten or twelve columns of such matter as the above, that may double, at times, in every column, it will be necessary to divide the job into four measures, and to empty the first six columns on one galley, and the second six on another. Each galley must then be made up separately, like the second specimen in the first example. When this is done, take out the rules which divide the measures, put the galleys together, and make the lines read with copy, by again inserting white-lines in the matter on either galley where the doubles require it. This being done, the matter is then ready to be made up either into octavo, to read across two pages, or into quarto, to read on one. The rules are then inserted and ready to be tied up and slided off.

Again; let us suppose another form, say an abstract of parliamentary documents. The measure for this, say seventeen ems, to be divided into four columns, the first for the name of the article, the second for the quantity imported, the third for the quantity retained for home consumption, and the fourth for the quantity exported. As the three last columns will be figures, of course, they should be made up to even *ems of the body in* which the job is set; say five ems for

each of the three columns. The width of the first column will then be just fifteen ems, (whatever the job is set in) short of seventeen ems pica. Cut a piece of waste lead exactly the length of these fifteen ems, and reduce the width of the first column equal to the thickness of the three brass-rules which are to divide the columns. It is easily done; put the piece of lead just cut to the width of the three columns into the stick made up to seventeen pica ems, and three pieces of rule, with their ends out of the stick, make up the remaining difference of the seventeen ems with quadrats and justify. These quadrats, and the spaces with which they are justified, is the exact width of the first column, which is to contain the name of the article. Take out then the three rules and again make up the stick to the lead and the quadrats which remain, and the measure will then be exactly the thickness of three rules short of seventeen ems pica. Being provided with a setting-rule, the job may now be composed. In setting, then, the first column, justify against the lead before cut for that purpose. The other columns will not require it, inasmuch as each of them being figures, and made to even ems, will justify themselves. The matter thus composed, would then be as the following example:—

| Name of Article. | Imported. | For Consumption | Exported. |
|---|---|---|---|
| Senna . . lbs. | 250,296 | 130,222 | —— |
| Shumac . . cwt. | 133,799 | 127,821 | —— |
| Silk:— | | | |
| Raw and Waste lbs. | 3,992,593 | 3,778,791 | 29,975 |
| Thrown . do. | 629,281 | 514,240 | 25,211 |
| Manufs. of Europe do. | 158,831 | 148,478 | 9,202 |
| ——India, viz:— | | | |
| Bandanas, &c. pieces. | 185,117 | 101,023 | 100,337 |
| Crape . . do. | 1,307 | —— | —— |
| Crape scarfs, &c No. | 27,233 | —— | —— |
| Taffeties, &c. pieces. | 10,631 | 5,516 | 6,383 |
| Skins:— | | | |
| Calf and kid cwt. | 42,637 | 40,194 | —— |
| Deer, undressed No. | 125,357 | 31,079 | 112,948 |
| Goat, do. do. | 354,548 | 212,422 | 81,459 |

To put in the rules, turn the galley with the head towards you, open the columns at the head of each page with the point of a bodkin, and in a few minutes the rules may be inserted, and the pages completed, thus:—

| Name of Article. | Imported. | For Consumption. | Exported. |
|---|---|---|---|
| Senna . . lbs. | 250,296 | 130,222 | —— |
| Shumac . . cwts. | 133,799 | 127,821 | —— |
| Silk :— | | | |
| Raw and Waste lbs. | 3,992,593 | 3,778,791 | 29,975 |
| Thrown . do. | 629,281 | 514,240 | 25,211 |
| Manufs. of Europe do. | 158,831 | 148,478 | 9,202 |
| ——— India, viz:--- | | | |
| Bandanas, &c. pieces | 185,117 | 101,023 | 100,337 |
| Crape : . do. | 1,307 | —— | —— |
| Crape scarfs, &c. No. | 27,233 | —— | —— |
| Taffeties, &c. pieces | 10,631 | 5,516 | 6,383 |
| Skins :— | | | |
| Calf and kid . cwts. | 42,637 | 40,194 | —— |
| Deer, undressed No. | 125,357 | 31,079 | 112,948 |
| Goat, do do. | 354,548 | 212,422 | 97,459 |

The three column rules being now in the matter, the width of each page will be exactly seventeen ems pica, the original measure, which was first proposed.

Though the above examples perhaps sufficiently explain the system which reduces table-work to common matter, I will take another instance, more fully to demonstrate that this system is unlimited in its application to any number of columns. For this purpose, then, I will take a few occultations of fixed stars by the Moon, which, as this table contains nine columns, may be submitted as a final test. The width of the table, when composed, say, again, seventeen ems. As the last eight columns will be even ems, cast off the width of each by the body of the letter in which the table is to be set; say two ems and an en for the second column, two ems and an en for the third, two for the fourth, two for the fifth, two and an en for the sixth, two and an en for the seventh, two for the eighth, and two for the ninth. These

quadrats named for the width of the respective columns being in the stick, add nine rules thick way, and as many quadrats as will make up the remaining difference of the seventeen ems, and justify. This will give the width of the first column, which is to contain the names of the stars. Take the rules out of the stick now, and make up the measure to the line of quadrats which remains in the stick, which will, of course, be the thickness of nine pieces of rule less than seventeen ems pica. Having cut a piece of lead to the width of the quadrats for the last eight columns before named, against which the first column must be justified, and got a setting-rule, you may now begin to compose. Be particular in justifying the first column against the lead, or there may be some difficulty in getting the tables to lift. It is attention only to this, that trouble and difficulty at the stone can be avoided. Indeed I will leave it to the experience of others, to determine what description of matter will lift without being properly justified. A table thus composed, would then be represented as follows:—

| Star. | IMMERSION. | | | | EMERSION. | | | |
|---|---|---|---|---|---|---|---|---|
| | Real Time. | Mean Time. | N. Point | Ver-tex. | Real Time. | Mean Time. | N. Point | Ver-tex. |
| Scorpii . . . | 13.10 | 18. 4 | 110 | 79 | 14. 2 | 18.56 | 211 | 186 |
| Tauri . . . . | 2.24 | 6.25 | 112 | 89 | 3.41 | 7.42 | 295 | 290 |
| Tauri . . . . | 5.24 | 9.30 | 55 | 65 | 6.25 | 10.22 | 331 | 355 |
| Tauri . . . . | 3.11 | 7. 4 | 150 | 114 | 3.58 | 7.51 | 234 | 224 |
| Geminorum. | 9.50 | 13.42 | 106 | 148 | 10.51 | 14.43 | 252 | 235 |
| Geminorum. | 13.16 | 17. 7 | 129 | 166 | 13.54 | 17.46 | 228 | 263 |
| Cancri . . . | 15.30 | 19.14 | 90 | 127 | 16.18 | 20. 1 | 264 | 279 |
| Virginis . . . | 13.21 | 16.41 | | | | | | |
| Sagatarii . . | 14.25 | 17.26 | 140 | 106 | 14.59 | 18. 0 | 201 | 171 |
| Piscium . . | 4.20 | 6.55 | 60 | 96 | 4.46 | 7.31 | 254 | 32 |
| Virginis . . . | 8.32 | 10.15 | 101 | 68 | 9.24 | 11. 7 | 208 | 182 |
| Virginis . . . | 7.54 | 9.29 | 50 | 11 | 8.49 | 10.24 | 258 | 222 |
| Libræ . . . . | 11.27 | 12.53 | | | | | | |

The matter made up into pages, and the rules put in as before described, the table would then be complete and ready to impose, thus:—

| Star. | IMMERSION. | | | | EMERSION. | | | |
|---|---|---|---|---|---|---|---|---|
| | Real Time. | Mean Time | N. Point | Ver-tex. | Real Time. | Mean Time. | N. Point | Ver-tex. |
| Scorpii . . . | 13.10 | 18. 4 | 110 | 79 | 14. 2 | 18.56 | 211 | 186 |
| Tauri . . . . | 2.24 | 6.25 | 112 | 89 | 3.41 | 7.42 | 295 | 290 |
| Tauri . . . . | 5.34 | 9.30 | 55 | 65 | 6.25 | 10.22 | 331 | 355 |
| Tauri . . . . | 3.11 | 7. 4 | 150 | 114 | 3.58 | 7.51 | 234 | 224 |
| Geminorum. | 9.50 | 13.42 | 106 | 148 | 10.51 | 14.43 | 252 | 235 |
| Geminorum. | 13.16 | 17. 7 | 129 | 166 | 13.54 | 17.46 | 228 | 263 |
| Caneri . . . | 15.30 | 19.14 | 90 | 127 | 16.18 | 20. 1 | 264 | 279 |
| Virginis . . . | 13.21 | 16.41 | | | | | | |
| Sagitarii . . | 14.25 | 17.26 | 140 | 106 | 14.59 | 18. 0 | 201 | 171 |
| Piscium . . . | 4.20 | 6.55 | 60 | 96 | 4.46 | 7.31 | 254 | 32 |
| Virginis . . . | 8.32 | 10.15 | 101 | 68 | 9.24 | 11. 7 | 208 | 182 |
| Virginis . . . | 7.54 | 9.29 | 50 | 11 | 8.49 | 10.24 | 258 | 222 |
| Libræ . . . . | 11.27 | 21.53 | | | | | | |

It may here be observed, that in setting the heads, it is the best to set them complete with short rules between two long cross rules, as independent tables, like the heads in the preceding examples. There will be no difficulty in those short pieces of rule in the head properly joining the column rules, if there be care in setting the heads to the proper width of the columns. Unless the heads be set in this manner, there will be difficulty in getting the rules in between the heads, and a danger of breaking them, which it is better to avoid.

There is another thing which is equally important in setting table work, and that is, that all the column rules be exactly of a length, whether they be pieced or whole. To secure this, as well as to do away with the loss of time and excessive waste arising from the continual use of the shears, I planned, between six and seven years ago, a brass rule case, divided into thirty four compartments, each of which holds two sizes of rule. Brass rule being thus cut into proper lengths, and kept separate, yields advantages both to the employer and the employed, that those only who *have experienced* them can form an idea. As, however, I *conceive its adoption* to be more within the province of

employers, I have reserved a special notice of it for the Appendix, which is exclusively devoted to materials.

If it be not a subject too trifling, I would recommend, to every jobbing compositor, a bodkin sheath, which though simple and easily made, is nevertheless useful. It is made of wire a little finer than an ordinary sized bodkin-blade, and is fastened by means of two arms, or by an eye and hook, to the apron-string. As the sheath is thus fastened, it remains attached to the person at work without any further care, and is particularly handy and convenient at all times when wanted. Should any be disposed to adopt it, let him buy a halfpenny worth of wire of the size before named; with this description of wire it may be made as follows. Hold the bodkin for which the sheath is intended, and the end of the wire, in the left hand. Beginning close to the handle, and about three inches from the end of the wire, twist the wire close round the bodkin-blade until it is covered. Again beginning, as it were, from the point, continue wrapping the wire till it again reach the handle, when, leaving two inches for the arms, cut the remainder off, if any be left, and bend the two ends so that they will hold the sheath by the apron-string without slipping; and it is completed. It may appear unseemly, but were I not convinced of its utility from experience, I should not have been easily induced either to try my own ingenuity or the reader's patience with an attempt to describe it. Having used one myself nearly six years, I can say that, as simple as it is, I would not willingly, or even for a small sum, be without it.

### LONDON AND LIVERPOOL JOB-WORK PRICES.

Jobs of one sheet or under (except Auctioneers' Catalogues and Particulars) to be cast up at 7d. per 1000; if done in minion, 7½d; if in nonpareil, 8d. If in foreign language, of one sheet or under (except Auctioneers' Catalogues) to be cast up at 8d. per 1000; if done in smaller type than brevier, *to take the same* proportionate advance here specified.

any other kind of matter, constituting a third, then to be paid as a sheet if in folio, half sheet if in quarto, and so on.

Broadsides, such as leases, deeds, &c., to be cast up at 5d. per thousand common matter. The indorse to be paid one fourth of the inside page.

The imprint to be included in the square of the page.

No charge to be made for job furniture.

Extra corrections to be paid 6d. per hour.

Jobs having two or three head rules, and three and not more than four columns, to be considered tabular; all above to be reckoned table-work; the first to be paid one and one half, and the second double price.

All jobs, in various sized types, to be cast up to their different bodies.

*Posting Bills, &c.*

| | s. | d. | | s. | d. |
|---|---|---|---|---|---|
| Double Demy Broadsides | 7 | 6 | Double Foolscap and Pot Broadsides | 6 | 0 |
| Double Crown ditto | 7 | 0 | | | |

If any Double Broadside be set up at twice, to be paid for accordingly.

*Royal.*

| | | | | | |
|---|---|---|---|---|---|
| Broadsides | 6 | 0 | Sixes and Octavo | 1 | 0 |
| Folio | 3 | 0 | Nines and Twelves | 0 | 10 |
| Quarto | 1 | 3 | | | |

*Demy.*

| | | | | | |
|---|---|---|---|---|---|
| Broadsides | 5 | 0 | Sixes and Octavo | 0 | 10 |
| Folio | 2 | 6 | Nines and Twelves | 0 | 9 |
| Quarto | 1 | 0 | | | |

*Crown and Post.*

| | | | | | |
|---|---|---|---|---|---|
| Broadsides | 4 | 0 | Quarto | 1 | 0 |
| Folio | 2 | 0 | Sixes and Octavo | 0 | 9 |

*Foolscap and Pot.*

| | | | | | |
|---|---|---|---|---|---|
| Broadsides | 3 | 6 | Quarto | 0 | 10 |
| Folio | 1 | 6 | Sixes and Octavo | 0 | 9 |

All Bills, if solid matter, set up in less type than English, *to be cast up.*

*Circulars, &c.*

| | s. | d. | | s. | d. |
|---|---|---|---|---|---|
| Quarto Circulars, Common Type | 1 | 0 | Octavo Circulars, Common Type | 0 | 9 |
| If in French Script, solid | 1 | 6 | If in French Script, solid | 1 | 0 |
| Ditto light | 1 | 0 | Ditto light | 0 | 9 |

Circulars, if solid matter, set up in less type than Pica, to be cast up.

| | | | | | |
|---|---|---|---|---|---|
| Large Cards | 1 | 0 | Invoice heads, with Date & £. s. d. Columns, Quarto & Octavo | 1 | 0 |
| Small Cards | 0 | 6 | | | |
| Invoice Heads, Post or Foolscap | 0 | 9 | Ditto ditto Folio | 1 | 6 |

All Way-bills and Headings of Way-bills to be paid according to value.

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## CHAP. III.

---

## BOOK-WORK.

ITS PECULIARITY,—DEPTH OF TYPE,—CASTING OFF COPY,—MAKING UP,—IMPOSING,—SCHEMES OF IMPOSITION, ETC.

Though the general character of bookwork is so much like news-work as to supersede the necessity for many special remarks, yet the one, being much superior in point of care and neatness to the other, will, perhaps, sufficiently entitle it to a separate consideration. It is from this department of case that the finest works of the day are issued, both in general and periodical literature. Unlike either newspapers or jobbing, the work of book-hands is preserved in the most splendid bindings, and exhibited in the most magnificent libraries. Where shall we look for better specimens of the art, than those with which we are supplied by the spirited and talented enterprise of the London *booksellers*, in "The Annuals?" which are creditable

alike to the compositors and to the pressmen. Accustomed to book-work, the spacing of compositors in this branch is regular and consistent, the instances of words divided, except unavoidable, few, the pages made-up neat, and the impositions exact. To excellence in these things it is that book compositors are indebted for their good name as workmen; and hence the necessity for care and attention.

Having already noticed laying-up, distributing, composing, and correcting on a newspaper, any further comment on these is unnecessary; except, indeed, merely to point out the trifling variations in laying-up and correcting. On book-work, unlocking the forme and laying it up on a letter board instead of a galley makes all the difference in the first, as correcting at the stone instead of the frame is the only variation in the second. It only remains, therefore, to mark those peculiar features by which book-work is distinguished.

Even spacing, being important to the appearance of work, is indispensable in this branch of case; so much so, indeed, that he who is too careless to adopt it, must be content if his name, ultimately, becomes a bye-word for a sloven. Having already noticed, in my remarks on composing on news-work, the best method of sorting spaces so as to facilitate this object, any further observation on this head is unnecessary; the more so, as spacing even is merely the act of justifying words at equal distances with those spaces. The following

DEPTH OF TYPE,

As it shows the true standard of each body, will readily enable every person to ascertain the character of the respective founts:—

| | | |
|---|---|---|
| English ..... | has..... 64 | lines to a foot. |
| Pica ..... | 71½ | ditto. |
| Small Pica..... | 83 | ditto. |
| Long Primer..... | 89 | ditto. |
| Burgeois ..... | 102¼ | ditto. |
| *Brevier* ..... | 112½ | ditto. |
| *Minion (half English)*..... | 128 | ditto. |

Nonpareil (half Pica) ....has....143 lines to a foot.
Ruby (half Small Pica) .....160½ ditto.
Pearl (half Long Primer) .....178 ditto.
Diamond (half Burgeois) .....205 ditto.

There is a smaller fount than Diamond used in Paris by Didot, which, it is expected, will speedily be brought into use in England; it is in depth equal to half a nonpareil.

As authors, generally, wish to know the number of pages their copy will make, before the work is put in hand, how to supply the information required is the next consideration. This is denominated

### CASTING-OFF COPY.

Were the copy written regular, without so many interlineations and erasures, to cast off copy would be comparatively easy, but since it is the practice of authors to send it full of irregularities, we must be content, though our calculations prove not so accurate as we wish. As there are two methods of doing this with equal certainty, I may notice both, and leave it for each to determine for himself which is best.

The first thing which ought to be observed and decided, in beginning to cast off any given number of folios of copy, is, how far the interlineations will make up for the erasures. This ascertained, see whether the number of lines on each folio are equal; if they vary, count off the folio containing the greatest number of lines, as well as that on which there is the smallest, and divide the difference. This will give the average number of lines on each folio throughout. For instance, say the largest number on one folio is thirty lines, and the smallest on another twenty-six. Here the difference being four lines, half is two, which added to the smallest number, will make the average on each folio twenty-eight. The average being thus obtained, make up the measure to the width intended, and set up as many lines in the letter in which it will be printed as will make even lines of copy and even lines of matter. It is of no moment whether the copy or the *matter* make the greatest number; the principle is the

dividing this then by 396, the number of words in a printed page, the number of pages given will be 440, thus:—

```
11 words in a line          396] 174,150 [439 pages:
36 lines in a page             1584      1 do.
---                          ------    ---
396 words in a page            1575    440
---                            1188    ---
                             ------
                               3870
                               3564
                               ----
                                306 words, reckoned
                               ---- as a page.
```

```
pages in a sheet 24] 440 [18 sheets.
                      24
                     ---
                     200
                     192
                     ---
                       8 pages, reckoned as half-sheet.
                     ---
```

The copy being thus cast off, and every thing connected with it decided, the composition of the work now proceeds, until a sufficient quantity of matter is up to make a sheet or half-sheet, as the case may be, for the first forme. This being done, the matter is ready for

### MAKING-UP.

If the work is to have running-heads, set them first; if not, set the folios, and the white-lines which are to separate them from the matter, as well as those for the bottom of the pages; also the signature. These are set in the same letter as the body of the work. The number of lines in a page *being already decided*, leave about as many lines as will

make the first page,* and empty a folio and white-line for the second. Counting the necessary number of lines for this, empty another white at the bottom, and make by this a gauge for the rest, by cutting a notch on a reglet the exact length of the page, including the foot-white. By this gauge now make up the first page, which, always being short, requires a line of quotations at the head instead of a folio. It is on this account that a gauge cannot be made by it. This made up, then make up the third, the same way as the second, and so on, until the whole sheet or half-sheet is completed. It is only further necessary to observe, under this head, that, should the matter be leaded, the white-lines before and after each page will also require a lead. Also, that if white-lines be used to separate the paragraphs in leaded matter, it is of consequence for getting good register, that a lead also be inserted before and after each.

In tieing up the pages, be careful that the page-cord is wrapped and drawn tight round the *middle* of the shanks, and not like some slovenly workmen who on one side wrap it at the top of the shank, and on the other at the bottom. It is thus that pages are squabbled; how, indeed, can it be otherwise, when any alteration of the cord would make them so slack that even the greatest care could not always be successful in preventing it. The pages, then, being firmly and neatly tied, are arranged on the imposing stone according to the scheme by which they are to be imposed.

### IMPOSING

Is a very important feature in book-work, and includes not only laying the pages in their respective places so as to fold according to their progressive order, but also fixing the crosses of the chase in their proper places, separating, with furniture, the pages into proper distances, so as to have an equal margin, when printed, round each, taking off the cords, and locking up the forme.

* The "first page" here spoken of, must be understood as the first page of the running on matter, and not the title-page.

Laying the pages being the first and principal operation under imposing, it may be observed, that the fidelity with which the various schemes have been copied by every compiler of the printers' grammar, would almost induce the belief, either that there was no other possible way of imposing but by those schemes, or that those were the best. A little consideration, however, on the principle of imposing, forces the conviction that such a belief is unfounded, and that all those schemes of imposition, under certain circumstances, are not the best. It may be said, indeed, that, if the pages of a forme fall right in folding, it is of little consequence where each page is placed in the forme, and, therefore, one scheme appears as good as another. Providing that all the pages in a forme are solid, this may be true; but in a forme containing one or two light, and as many blank, pages, I will venture to assert that one scheme is not as good as another. To me, that scheme appears the best which offers the greatest protection to those light pages which are the most liable to be filled up in rolling by the ends of the roller, and obviates, though only partially, a thick heavy impression in pulling. As the pages next the cross in a forme of twelves, for instance, are the least liable to be filled up, all light pages that can be worked there, without inconvenience to the folding, must be an advantage both to the pressman and to the appearance of the work. If this be admitted, I may proceed at once to show how this advantage may be attained, by enumerating those several improved schemes of imposition which ensure it. That these schemes, however, may be complete, I will take them in their proper order, which will give occasion to notice, first, those which appear hardly capable of improvement. The first of these is—

A SHEET OF FOLIO.

| Outer forme. | | Inner forme. | |
|---|---|---|---|
| 1 | 4 | 3 | 2 |
| A | | A 2 | |

Though imposing several sheets of folio to lie one in another, which is termed "quired," is but seldom practiced, except in very rare instances, I need not apologise for noticing the manner in which it is done, inasmuch as this scheme is one amongst those which complete the whole. It may, however, be practiced to any extent, providing that all the pages are up at one time, and the first and the last be imposed together, the second and the last but one together, and so on, increasing from the beginning, and decreasing from the end, until all the pages are laid in their respective places. If they be right, the numbers of every two pages imposed together will be equal to the first and last pages united. For instance, if there were sixty pages to be quired, sixty being the number of the last folio, added to one, the first, would be sixty-one, therefore the united number of every two pages imposed together should be the same. This principle applies to every other forme, and is an infallible test of the pages being right. According to this principle, three sheets of folio, quired, would be correctly imposed thus:

Outer forme of 1st sheet.

1 12

▲

Inner forme of 1st sheet.

11 2

Outer forme of 2nd sheet.

3 10

▲ 2

Inner forme of 2nd sheet.

9 4

Outer forme of 3rd sheet.

5 8

▲ 3

Inner forme of 3rd sheet.

7 6

---

HALF SHEET OF QUARTO.

2 3

1 4

▲

A SHEET of QUARTO and a common HALF-SHEET of OCTAVO are imposed exactly alike, the only difference being, that the first is locked up in two chases, the second in one; thus:—

| | | | |
|---|---|---|---|
| 4 | 5 | 9 | 3 ▼ 2 |
| 1 ▲ | 8 | 7 | 2 |

If, however, the forme to impose be OCTAVO, with the title on the first page, a blank on the second, and a bastard on the third, the best way to impose it, as a half-sheet, is thus:—

(NEW.)

| | | | |
|---|---|---|---|
| 9 | 3 ▼ 2 | 4 Bastard. | 5 |
| 7 | Blank. 2 | 1 ▲ | 8 |

By this imposition all the light pages are in the inner portion of the forme, and on that account will come off better and be less liable to fill up.

---

TWO QUARTERS OCTAVO.—(NEW.)

| | | | |
|---|---|---|---|
| 4 | 1 ▼ 2 | 2 | 3 |
| 3 | 2 | 1 ▲ | 4 |

---

If all the pages in a SHEET of OCTAVO be solid, it may be imposed thus:—

| Outer Forme. | | | | Inner Forme. | | | |
|---|---|---|---|---|---|---|---|
| 8 | 6 | 12 | 5 | 9 | 11 | 10 | 4 |
| 1 ◢ | 16 | 13 | 4 | 3 ▲ 2 | 14 | 15 | 2 |

But if it be a pamphlet, making, with the title and two or three light pages at the beginning, sixteen pages octavo, it would be better, for reasons before given, imposed thus:—

(NEW.)

| Outer Forme. | | | | Inner Forme. | | | |
|---|---|---|---|---|---|---|---|
| 12 | 5 | 8 | 6 | 10 | 7 | 9 | 11 |
| 13 | 4 | 1 ▲ | 16 | 15 | 2 | 3 ▲ 2 | 14 |

The folios will sufficiently indicate the difference in the folding of this and the preceding imposition.

---

SHEET OF BROAD OCTAVO.

| Outer Forme. | | Inner Forme. | |
|---|---|---|---|
| | | | 2 ▼ |
| 4 | 13 | 14 | 3 |
| 5 ▲ 3 | 12 | 11 | 6 |
| | | | 7 ▼ |
| 8 | 6 | 10 | 7 |
| 1 ▲ | 16 | 15 | 2 |

2.—(NEW.)

| Outer Forme. | | Inner Forme. | |
|---|---|---|---|
| 5 ▲ 3 | 12 | 11 | 6 |
| | | | 2 ▼ |
| 4 | 13 | 14 | 3 |
| 1 ▲ | 16 | 15 | 2 |
| 8 | 6 | 10 | 7 |

### SHEET OF OCTAVO, WITH TWO SIGNATURES.

Twelve pages of a work and four of other matter.

| Outer Forme. | | | | Inner Forme. | | | |
|---|---|---|---|---|---|---|---|
| | | | ε ▼ | | | | x |
| 2 | ε | 8 | 5 | 9 | 4 | 7 | 1 |
| 1 ▲ | 12 | 9 | 4 | 3 ▲2 | 10 | 11 | 2 |

---

### HALF-SHEET OF TWELVES, WITHOUT CUTTING.

| 1.—COMMON. | | | | 2.—(NEW.) | | | |
|---|---|---|---|---|---|---|---|
| 5 | 8 | 7 | 6 | 7 | 6 | 5 | 8 |
| 7 | 6 | 01 | ε | 01 | ε | 7 | 6 |
| 1 ▲ | 12 | 11 | 2 | 11 | 2 | 1 ▲ | 12 |

| 3.—(NEW.) | | | | 4.—(NEW.) | | | |
|---|---|---|---|---|---|---|---|
| 01 | ε | 7 | 6 | 7 | 6 | 01 | ε |
| 11 | 2 | 1 ▲ | 12 | 1 ▲ | 12 | 11 | 2 |
| 8 | 5 | 9 | 4 | 9 | 4 | 8 | 5 |

These impositions possess peculiar advantages, inasmuch as the compositor may, by these, accommodate the situation of his pages according to circumstances. Though they will all fold without cutting, any of them may be adopted for eight pages of a work and four of other matter, by imposing the eight as a half-sheet of octavo, and the four as an off-cut *in the place of 5, 6, 7,* and 8.

1.—SHEET OF TWELVES, WITHOUT CUTTING.

| Outer Forme. | | | | Inner Forme. | | | |
|---|---|---|---|---|---|---|---|
| 5 ▲3 | 20 | 17 | 8 | 7 | 18 | 19 | 6 |
| | | | | | | | 2▼ |
| 4 | 21 | 16 | 9 | 10 | 15 | 22 | 3 |
| 1 ▲ | 24 | 13 | 12 | 11 | 14 | 23 | 2 |

2.—(NEW.)—WITHOUT CUTTING.

| Outer Forme. | | | | Inner Forme. | | | |
|---|---|---|---|---|---|---|---|
| 17 | 8 | 5 ▲3 | 20 | 19 | 6 | 7 | 18 |
| | | | | | 2▼ | | |
| 16 | 9 | 4 | 21 | 22 | 3 | 10 | 15 |
| 13 | 12 | 1 ▲ | 24 | 23 | 2 | 11 | 14 |

To impose sixteen pages of a work and eight of other matter as a sheet of twelves, impose the first as a sheet of octavo, and the second in place of the off-cut. I have one or two other impositions of twelves, but as I think the above will answer every purpose, I refrain inserting them.

---

HALF-SHEET OF LONG TWELVES.—[NEW.]

| | | | | | |
|---|---|---|---|---|---|
| 7 | 10 | 11 | 12 | 6 | 8 |
| 9 | 3 | 2 | 1 ▲ | 4 | 5 |

1.—SHEET OF LONG TWELVES.—[NEW.]

| Outer Forme. | | Inner Forme. | |
|---|---|---|---|
| 1 | 24 | 23 | 2 |
| A | | | |
| 12 | 13 | 14 | 11 |
| 9 | 16 | 15 | 10 |
| 4 | 21 | 22 | 3 |
| 5 | 20 | 19 | 6 |
| 8 | 17 | 18 | 7 |

2.—[NEW.]

| Outer Forme. | | Inner Forme. | |
|---|---|---|---|
| 5 | 20 | 19 | 6 |
| 8 | 17 | 18 | 7 |
| 9 | 16 | 15 | 10 |
| 4 | 21 | 22 | 3 |
| 1 | 24 | 23 | 2 |
| A | | | |
| 12 | 13 | 14 | 11 |

Mr. Stower's imposition of a sheet of long twelves *very bad, if not* decidedly wrong; I have, therefore, omitte

it entirely, and supplied the above. It is rather surprising that such an error should not have been detected by one or other of his copyers before this. There appears no reason in cutting a sheet up to fold it, when it is much better folded without. But this is not the worst feature of it; it will not fold as a sheet even when it is cut up, except as an octavo, and then it leaves an off-cut of eight pages to go to the end. Indeed, it is more like a sheet and a half octavo than a sheet of long twelves.

---

HALF-SHEET OF SIXTEENS is imposed exactly as a sheet of Octavo, except that this is in one chase and that in two.—(See pages 60 and 61.)

---

1.—SHEET OF SIXTEENS.

| Outer Forme. | | | | Inner Forme. | | | |
|---|---|---|---|---|---|---|---|
| 4 | 29 | 28 | 5 | 9 | 27 | 30 | 3 |
| 13 | 20 | 21 | 12 | 11 | 22 | 19 | 14 |
| 16 | 17 | 24 | 6 | 10 | 23 | 18 | 15 |
| 1 | 32 | 25 | 8 | 7 | 26 | 31 | 2 |

2.—(NEW.)

| Outer Forme. | | | | Inner Forme. | | | |
|---|---|---|---|---|---|---|---|
| 20 | 13 | 12 | 21 | 22 | 11 | 14 | 19 |
| 29 | 4 | 5 | 28 | 27 | 6 | 3 | 30 |
| 32 | 1 | 8 | 25 | 26 | 7 | 2 | 31 |
| 17 | 16 | 9 | 24 | 23 | 10 | 15 | 18 |

1.—HALF-SHEET OF EIGHTEENS.

| | | | | | |
|---|---|---|---|---|---|
| 14 | 5 | 10 | 6 | 9 | 13 |
| 4 | 15 | 12 | 7 | 16 | 3 |
| 1 | 18 | 11 | 8 | 17 | 2 |

2.—[NEW.]

| | | | | | |
|---|---|---|---|---|---|
| 12 | 7 | 10 | 6 | 8 | 11 |
| 14 | 5 | 2 | 17 | 9 | 13 |
| 15 | 4 | 1 | 18 | 3 | 16 |

The white paper of these formes being worked off, the four lowermost pages in the middle of each must be transposed; namely, in the first, pages 8 and 11 in the place of 7 and 12, and 7 and 12 in the place of 8 and 11; in the second, pages 1 and 18 in the place of 2 and 17, and 2 and 17 in the place of 1 and 18.

SIXTEEN PAGES TO HALF-SHEET OF EIGHTEENS.—(NEW.)

| | | | | | |
|---|---|---|---|---|---|
| 9 | 8 | | | 7 | 10 |
| 12 | 5 | 2 | 15 | 9 | 11 |
| 13 | 4 | 1 | 16 | 3 | 14 |

When the white paper is off, transpose pages 1 and 16 in *the place of 2 and 15*, and 2 and 15 in the place of 1 and 16.

SHEET OF EIGHTEENS FOLDED TOGETHER.

Outer Forme.

| | | | | | |
|---|---|---|---|---|---|
| 5 | 32 | 29 | 8 | 17 | 20 |
| A 3 | | | | | |
| | | | C V | | |
| 4 | 33 | 28 | 6 | 19 | 21 |
| 1 | 36 | 25 | 12 | 13 | 24 |

Inner Forme.

| | | | | | |
|---|---|---|---|---|---|
| 19 | 18 | 7 | 30 | 31 | 6 |
| | | A 4 | | | |
| | | | | | 2 V |
| 22 | 15 | 10 | 27 | 34 | 3 |
| 23 | 14 | 11 | 26 | 35 | 2 |

SHEET OF EIGHTEENS.

Twenty-four pages of a work and twelve of other matter.

Outer Forme.

| | | | | | |
|---|---|---|---|---|---|
| | B 3 | | | | B |
| 32 | 29 | 28 | 33 | 36 | 25 |
| | | | C V | | |
| 8 | 17 | 20 | 5 | 16 | 6 |
| 1 | 24 | 21 | 4 | 13 | 12 |
| A | | | | | |

Inner Forme.

| | | | | | |
|---|---|---|---|---|---|
| | | | B 2 | | B 4 |
| 26 | 35 | 34 | 27 | 30 | 31 |
| | | | | | 4 V |
| 10 | 15 | 9 | 19 | 18 | 7 |
| 11 | 14 | 3 | 22 | 23 | 2 |
| | | A 2 | | | |

SHEET OF EIGHTEENS, WITHOUT CUTTING.—(NEW.)

Outer Forme.

| | | | | | |
|---|---|---|---|---|---|
| 17 | 20 | 21 | 16 | 13 | 24 |
| 8 | 29 | 28 | 6 | 12 | 25 |
| 5 ▲3 | 32 | 33 | 4 | 1 ▲ | 36 |

Inner Forme.

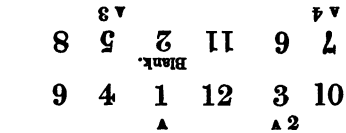
| | | | | | |
|---|---|---|---|---|---|
| 23 | 14 | 15 | 22 | 19 | 18 |
| 26 | 11 | 10 | 27 | 30 | 7 ▼ |
| 35 | 2 | 3 ▲2 | 34 | 31 | 6 |

---

SHEET OF TWENTIES.

| Outer Forme. | | | | Inner Forme. | | | |
|---|---|---|---|---|---|---|---|
| 20 | 21 | 24 | 17 | 18 | 23 | 22 | 19 |
| 5 ▲3 | 36 | 33 | 8 ▼ | 7 ▲4 | 34 | 35 | 6 ▼ |
| 16 | 25 | 28 | 13 | 14 | 27 | 26 | 15 |
| 9 ▲5 | 32 | 29 | 12 | 11 ▲6 | 30 | 31 | 10 |
| 1 ▲ | 40 | 37 | 4 | 3 ▲2 | 38 | 39 | 2 |

A QUARTER-SHEET OF TWENTY-FOURS.—(NEW.)




The white paper of this forme being off, the four inner pages are transposed; namely, 1 and 12 in the place of 2 and 11, and 2 and 11 in the place of 1 and 12.

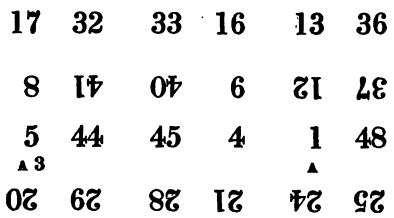
---

HALF-SHEET OF TWENTY-FOURS is imposed exactly as a sheet of twelves, but in one chase.—(See page 63.)

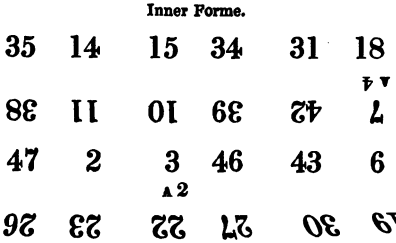
---

SHEET OF TWENTY-FOURS.—(NEW.)

Outer Forme.




Inner Forme.



### HALF-SHEET OF THIRTY-TWOS.

Is imposed as a sheet of Sixteens.—(See page 65.)

---

### SHEET OF THIRTY-TWOS.

Outer Forme.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4 | 61 | 36 | 29 | 28 | 37 | 60 | 5 V 3 |
| 13 A 7 | 52 | 45 | 20 | 21 | 44 | 53 | 12 |
| 16 | 49 | 48 | 17 V 9 | 24 | 41 | 56 | 6 V 5 |
| 1 A | 64 | 33 | 32 | 25 | 40 | 57 | 8 |

Inner Forme.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 9 | 59 | 38 | 27 | 30 | 35 | 62 | 3 V 2 |
| 11 A 6 | 54 | 43 | 22 | 19 | 46 | 51 | 14 |
| 10 | 55 | 42 | 23 | 18 | 47 | 50 | 15 V 8 |
| 7 A 4 | 58 | 39 | 26 | 31 | 34 | 63 | 2 |

---

### HALF SHEET OF THIRTY-SIXES

Is imposed as a sheet of Eighteens.—[See pages 67 and 68.]

---

### HALF SHEET OF FORTY-EIGHTS

*Is imposed as* a sheet of Twenty-fours.—[See page 69.]

HALF SHEET OF FORTIES

Is imposed as a sheet of Twenties.—[See page 68.]

---

A QUARTER SHEET OF FORTY-EIGHTS

Is imposed as a half-sheet of Twenty-fours or a sheet of Twelves.—[See page 63.]

---

A QUARTER SHEET OF SIXTY-FOURS

Is imposed as a half-sheet of Thirty-twos or a sheet of Sixteens.—[See page 65.]

---

HALF SHEET OF SIXTY-FOURS

Is imposed as a sheet of Thirty-twos.—[See page 70.]

---

As I think the impositions of seventy-twos, ninety-sixes, and one hundred and twenty-eights, given by others, is more curious than useful, I have omitted them. The foregoing I think, will be found sufficient to answer every purpose.

After the pages have been laid in their proper places for imposing, examine whether they be right, as before advised. —[See page 59.] This, if done before the chase is put round them, will save the trouble of transposing after they are untied, should there be any wrong. The chase being round put in the furniture and justify the distances between the pages to a sheet of paper, folded to the proper size, on which the forme is to be worked. The rule is, that the furniture should be exactly equal to the margin. Measure, then, the width of the page on the folded sheet, from one edge, and the margin, which will then be all on one side, will give the proper width of the furniture that will separate the pages. Measuring the length of a page the same way, with all the margin at the top, will also give the thickness between the heads. This done, see that the ends of the cord by which the pages are tied are out, quoin the forme all round, and

untie the pages carefully. Fit in larger quoins, lock up, and the forme may then be proved.

The proper signatures, which are merely small capitals inserted at the bottom of the first page of every sheet or half sheet for the convenience of the binder, comprehend the whole alphabet, except J, V, and W, which are not considered or used as signatures in book-work. If the work require more signatures than one alphabet will supply, it is repeated thus:—2 A, 2 B, 2 C, &c, &c.;—3 A, 3 B, 3 C, &c., &c., —4 A, 4 B, 4 C, &c., &c. A, of the first alphabet, is never inserted, the title-page being always considered as that signature. The signatures for Eighteens are somewhat different, every third letter only being used, beginning with B, thus:—B, E, H, L, O, R, U, Z; the second alphabet, thus:—2 C, 2 F, 2 I, 2 M, 2 P, 2 S, 2 X; the third thus:—3 A, 3 D, 3 G, 3 K, 3 N, 3 Q, 3 T, 3 Y, &c., &c.

### LONDON BOOK-WORK PRICES.

All works in the English language, common matter, with space lines, including english and brevier, to be cast up at 5¼d. per thousand; if in minion, 6d.; in nonpareil, 6¼d. Without space lines, including english and brevier, 6d. per thousand; in minion, 6¼d.; in nonpareil, 7d.; in pearl, with or without space lines, 8d.; heads and directions, or signature lines, included. A thick space to be considered as an en in width, and an en to be reckoned an em in the length of the page; and where the number of letters amount to five hundred—one thousand to be charged; if under five hundred not to be reckoned: and if the calculation at per thousand shall not amount to an odd threepence, the odd pence to be suppressed in the price of the work; but where it amounts to or exceeds threepence, there shall be sixpence charged. Em and en quadrats, or whatever is used at the beginning or the end of lines, to be reckoned as an em in the width.

Works printed in great primer to be cast up as english; and all works in larger type than great primer, as half *english and half* great primer.

All works in foreign languages, though common type, with space lines, including english and brevier, to be cast up at 6¼d. per thousand; if in minion, 6¾d.; nonpareil, 7¼d. Without space lines, including english and brevier, 6½d.; minion, 7d.; nonpareil, 7¾d.; and pearl, with or without space lines, 8¾d.

English dictionaries of every size, with space lines, including english and brevier, to be paid 6¼d. per thousand; without space lines, 6½d. (In this article are not included gazetteers, geographical dictionaries, dictionaries of arts and sciences, and works of a similar description, except those attended with extra trouble beyond usual descriptive matter. Dictionaries of two or more languages, of every size, with space lines, including english and brevier, to be paid 6½d. per thousand; without space lines, 6¾d.; if smaller type than brevier, to take the proportionate advance before specified.

English grammars, spelling books, and works of those descriptions, in brevier or larger type, with space lines, to be paid 6d. per thousand; without space lines, 6¼d.; if in two languages, or foreign language, with space lines, 6¼d.; without space lines, 6½d.

Small-sized folios, quartos, octavos, and works in great primer or larger type (English language) which do not come to 7s. when cast up at the usual rate, to be paid as follows: —english and larger type, not less than 7s.; pica, 8s. 6d.; english 12mo. to be paid not less than 10s. 6d.; and pica not less than 11s. 6d. per sheet.

Reviews, magazines, and works of a similar description, consisting of various sized letter, if cast up to the different bodies, to be paid 2s. 6d. per sheet extra.

Pamphlets of five sheets and under, and parts of works done in different houses, amounting to not more than five sheets, to be paid one shilling per sheet extra; but as it frequently occurs that works exceeding a pamphlet are often nearly made up without a return of letter, all such works shall be considered as pamphlets, and paid for as such.

*Works* done in sixteens, eighteens, twenty-fours, or thirty-

twos, on small pica and upwards, to be paid 1s. 6d. per sheet extra. If on long primer, or smaller type, 1s. per sheet extra. Forty-eights to be paid 2s. per sheet extra, and sixty-fours, 2s. 6d. per sheet extra.

Works requiring an alteration, or alterations of margin, to be paid for each alteration, one shilling per sheet to the pressmen, if altered by them, and sixpence to the compositor, as a compensation for making up the furniture; if altered by the compositor, then he is to be paid 1s. for the alteration, and the pressmen 6d. for the delay.—This article to be determined on solely at the option of the employer.

Bottom notes consisting of twenty lines (or two notes, though not amounting to twenty lines) and not exceeding four pages in every ten sheets in quarto or octavo:—one page (or two notes, though not amounting to one page) and not exceeding six pages in twelves:—two pages (or two notes, though not amounting to two pages) and not exceeding eight, in eighteens or above, to be paid 1s. per sheet; but under the above proportion no charge to be made. Bottom notes consisting of ten lines, or two notes, though not amounting to ten lines, in a pamphlet of five sheets or under, and not exceeding two pages, to be paid 1s. per sheet extra. Quotations, mottos, contents to chapters, &c., in smaller type than the body, to be considered as notes. [Where the notes shall be in nonpareil or pearl, in twelves, the number of pages to be restricted to four; in eighteens to five pages.]—This article is intended only to fix what constitutes the charge of 1s. per sheet for bottom notes; all works requiring a higher charge than 1s. for bottom notes, are to be paid for according to their value.

Side notes to folios and quartos not exceeding a broad quotation, if only chapter or date, and not exceeding three explanatory lines on an average in each page, to be paid 1s. per sheet; in octavo, if only chapter or date, and not exceeding three explanatory lines on an average in each page, 1s. 6d. per sheet. Cut-in-notes, in smaller type than the body, to be paid for in a similar manner.—Side and bottom *notes to many, particularly* historical and law works, if

attended with more than ordinary trouble, to be settled between the employer and journeymen.

Greek, Hebrew, Saxon, &c., or any of the dead characters, if one word and not exceeding three lines in any one sheet, to be paid for that sheet 1s. extra; all above to be paid according to their value.

Greek, with space lines, and without accents, to be paid 8½d. per 1000; if with separate accents, 10d.; without space lines, and without accents, 8¾d.; with accents, 10½d.; the asper not to be considered an accent. (If dictionary matter, to take one halfpenny advance.)

Hebrew, Arabic, Syriac, &c., to be paid double. Hebrew with points to be cast up as half body and half points doubled. The phrase "paid double" signifies double the price of common matter.

Music to be paid double the body of the sonnet type.

Index matter, though but one measure, to be paid 2s. per sheet extra.

Booksellers' catalogues (in whatever language) to be cast up at 7d. per 1000, not including the numbering.

### LIVERPOOL BOOK-WORK PRICES

Are much the same as those of London, the London scale being generally referred to and adopted. There are, however, a few minor regulations observed by the former which is not inserted in the scale of the latter; amongst which is,—that the sum of one shilling be charged for night-work on jobbing and book-work in all offices where the men are paid on the establishment; but where these, and newspapers, are worked at on piece-prices, the men shall charge according to the scale, viz. from ten o'clock to twelve, one shilling; and three-pence each hour extra until six o'clock in the morning.

### EDINBURGH BOOK-WORK PRICES.

That all works considered as common be cast up at 4½d. *per 1000,* including heads and directions.

That session-work and jobs be paid at the rate of 5½d. per 1000.

That all dictionaries done in the manner of a lexicon be paid at 5d. per 1000; but not to extend to dictionaries of science, or such as, from their nature, can be considered only as common matter.

That pamphlets of five sheets and under be paid one shilling per sheet above what they come to by letters, for furniture and extra trouble.

That all works heretofore paid double (Greek and Scheme) take a proportionate advance according to the first proposition.

That all works printed in a foreign language, though common type, be paid at 5d. per 1000.

That all works done on nonpareil be paid at 5d. per 1000; and on pearl, at 5½d. per 1000.

That grammars and school books, where roman and italic words occur alternately, with braces, different justifications, &c., be paid at 5½d. per 1000.

That newspapers be considered as liable to a proportionate advance, according to the first proposition.

# PART II.

## GENERAL OBSERVATIONS.

In the preceding Part, I have endeavoured to show the young compositor, not only what constitutes a good workman in the three departments into which case is divided, but also to assist him to acquire a practical knowledge of each. In this, the Second Part, I will make a similar attempt, to assist the young workman at those several operations which devolve upon him at

## PRESS AND MACHINE.

Though this part of the profession is very important to the appearance of work, it is not of that character which requires either much intellect or much forethought to excel at it. The operations are simple and purely mechanical, and never vary; except, indeed, in the amount of care sometimes required for particular work. From a pressman, there is very little required, besides getting an even impression, and pulling and keeping a regular colour. Add to these, however, a knowledge how to make a roller in good working order, and how to wet paper for a light or heavy forme, and the whole art of press-work is made up. The machine, though a complicated piece of mechanism, requires less, and is even more easy to work than the press; for besides fas-

not count it a difficulty, even if he be required to put one up; the difference can only be in the means adopted for obtaining power. The only presses which may be said to be unlike any other is the Ruthven and the Treadwell, but these not being in such general use, it is unnecessary to attempt to give directions to put them up. It will be sufficient to observe that the press-tables of both are stationary; the platten of the former running over the table, while the platten of the latter, being attached, rises and falls with the tympan. Without, however, attempting to investigate the peculiar merits of each, the first which deserves attention is,

THE COLUMBIAN PRESS,

Which is put up according to the following directions:—

When you have the staple on the spot where you intend it to stand, put the feet on their respective places as marked, and raise it upon them; then put the bar-handle in with the bolt belonging to it as marked; then put the principal lever into its place, and put the bolt in which connects it to the staple; then put the angular or crooked part, which has three round and one square hole, through it into the mortice, which is in the projecting part of the long side of the staple, and put in the bolt that attaches it to the *staple*. In the extremity of the edges of the heads of those *two before-mentioned* bolts you will observe marks, and cor-

responding marks over the holes through which they pass, put the bolts in so as the said marks meet together and correspond, and so on until you have all the remaining parts in their respective places. Put on the ribs, and having made them perfectly straight, screw them tight to the staple. This done, lift the press-table into its place, and attach it to the rounce with the girths; the press being now ready for the platten, put the four screws which have heads on one side, intended to attach the platten to the piston, into their respective places in the piston, and screw on the nut belonging to each. The press-table being properly adjusted with a spirit-level, fix a bearer at each corner and one in the centre, and lift the platten on them. The platten being fixed straight, raise the screws in the piston, and roll in the platten as it is fixed on the bearers on the table, until it is exactly under the piston, when the screws, already in the piston, are fixed, with their heads from you, into their proper places in the platten, and secured by the four small blocks of iron which accompany them. After putting the necessary number of tin or iron plates under the piston, bring the bar-handle over till the piston and platten come in contact, and hold it there till each nut is screwed tight with the hand. This done, give each nut one turn or so with a screw-key. It being these plates of tin or sheet-iron which increase the impression, care in ascertaining the proper number required will obviate the necessity and save the trouble of either adding to or decreasing the number after the platten is screwed up and adjusted. In adjusting the platten, make a gauge that will exactly come between and touch the platten and the table, with the bar-handle at rest. With this gauge, which may be made of two four-line quotations and justified to the proper height with paper, card, or leads, try whether the platten is exactly parallel with the table, by rolling it in and inserting the gauge under each corner of the platten. If any part of it be thus found lower than the rest, it must be raised, by turning a little the nut of the platten-screw next the part to be raised. Again try the gauge, and if not yet exactly true, again screw the nut a little next the part affected; half or quarter of a

turn will make a great difference. By thus gauging and tightening the nuts, the platten may be adjusted to a mathematical nicety. It is necessary always to keep the proper side of the connecting rod up, when you have occasion to take the bolt out of the elbow of the bar, either to increase or diminish the power; increasing the power is effected by turning the rod so as to shorten it, and the decreasing it by turning it the contrary way. By the nut on the iron screw, which connects the main and top counterpoise levers, you are to regulate the ascent and descent of the platten, so as to clear the head-bands of the tympans, which is done by screwing the iron nut up as far as is necessary. The small holes which communicate with the respective bolts require a small portion of pure sweet oil occasionally, and the use of the purest Florence flask oil is recommended as the cheapest in the end, which has been experimentally proved. You may easily judge whether every thing is put in its proper place, by the perfect ease with which the bar-handle moves when put up. In your commencement of working, let your impression be rather light, and increase it by the before-mentioned means, until you have obtained such an impression as is desired.

In addition to the foregoing observations and directions, it may be proper to state, that the printers who use the Columbian Press will find it to their advantage to study it, so as not only to comprehend the principle on which it is constructed, but likewise the whole mechanical combination of the component parts, as a correct understanding of it is necessary to enable them to adjust it so as to work to the best advantage. It is likewise recommended to them to let the pressmen take all the cylindrical bolts out of their respective places once a week, taking out one at a time, cleaning and oiling it, and putting it into its place again, which will tend to render a comprehensive and perfect knowledge of the press familiar to him.

THE IMPERIAL PRESS.

First, put on the legs to their corresponding marks on the staple. After you have placed the ribs to their marks, and before you have made them fast, see that the table runs in true between the cheeks of the staple; then screw them fast. Hang the platten by its screws to the piston; observing, by the marks, that the screws and cotters are each in their proper holes. [For directions how to attach and adjust the platten, see Columbian Press.] The bar-handle, the rounce, the rib-stay, &c., as they can only be put in their respective places, need no directions, except a reference to the accompanying print. The small round bar of iron sent with the press, is called the oiling bar. When the press requires oiling, bring the bar-handle home to the cheek, then place the oiling-bar between the head of the press and the frame

of the piston; which, taking off the power of the springs, sets the working parts of the press at liberty; you can then with ease take out the main bolt, chill, &c., and after oiling the bearings, replace them in the same manner as before; (the parts marked "front" must be kept to the front of the press;) and removing the bar, the press is again in working order. The screw in front of the piston is connected with a wedge, by which you may with perfect ease at all times regulate the pull to your work; observing that the pull is correct when the screw is about half way out. If the impression is then too light, place between the two wedges, at the back of the piston, a strip or two of tin, or as many as will give you the power required. After the platten is by this means once properly adjusted, it will not at any time need (as some presses do) to be unscrewed, iron or cards to be introduced between the piston and platten, and a re-adjusting of the platten. The wedge will then act properly, and by screwing it in or out, the impression will be light or heavy, as the work requires; taking care, whenever you use the screw, to fix the oiling-bar as directed to be done when you oil the press.

N.B. The press is always working to its full power when you bring the bar-handle home to the cheek of the staple; and, whether the work requires a light or heavy impression, should always be so worked. The same observations respecting oiling, and keeping the Columbian Press clean, are equally applicable to the Imperial Press.

The press being up, the first thing to be attended to is,

### COVERING THE TYMPANS.

And for this nothing is equal to parchment, when it is of an even thickness. The best way of putting it on is, to wet round the edges only, in which state it should be put on the iron tympans, with good thick paste, as tight as possible. The only instruction necessary to do this is, first, to observe that the parchment is sufficiently large to wrap well round *the tympan*; and, second, to exercise care in cutting the

parchment to admit the frisket-nuts and tympan-hooks, and to wrap round the inside edge of the groove in which the point-screws slide. It is the accuracy with which these things are done, that the whole art of putting parchments neatly on tympans consist. The parchment on the outer tympan should have the smooth side next the forme; that on the inner one, the smooth side next the platten. If the parchment be put on tight, it is of little consequence which part of the tympan is commenced with. Immediately after the tympan is covered, take it to the sink, and saturate the parchment on the outside, with water, till it become perfectly tight; and it will remain so ever afterwards.

### WETTING PAPER.

Though this is a simple operation, and easily acquired, the work being done well so much depends upon the paper being properly wet, that a special notice of it can hardly be deemed superfluous. Working on too dry paper not only does great injury to the face of the type, but gives the impression, though even, particularly if it be a heavy forme, a very piebald appearance. To obviate this, an extra quantity of ink is required, which again produces a corresponding defect, and surrounds every word of the sheet with a kind of bur. This arises from the incapacity of the paper in this state to absorb the ink, which, when the forme is pulled, presses it off the face on to the outer edges of the type, and thus destroys every pretension to good work. Nor is the work improved by the paper being too damp; in this state, the ink tears the paper, dirties the roller and ink-table, throws picks on the forme, and gives the whole sheet, when pulled, a heavy, thick, bad appearance.

As all these defects will be obviated if the paper be in proper order, surely to know how to make it so deserves a little attention. Before the paper is wet, then, it is requisite to know two things; first, the nature of the forme,—is it solid or open; second, the nature of the paper,—is it spongy or hard. If the forme be solid and the paper be hard and well

sized, of course, it will require much more water than it would if spongy, though the forme were still solid. Again, for an open forme the paper, though hard, would take much less water than it would for a solid one, and still less if spongy, because softer the paper is made with water and thicker and heavier is the impression when pulled.

The nature of the forme and the quality of the paper being ascertained, the number of times the paper should be wet every quire may then be determined. Hard well-sized paper may be wet three, four, five, or even six times a quire, while soft spongy paper should not be dipped more than twice or once in a quire, or perhaps, should only be sprinkled every quire and half or two quires. How many times a quire should be wet, however, the pressman himself must decide, according to the quality of the paper and the forme for which it is intended; and for this a little observation will sufficiently qualify any one. This being known, it only remains to notice the best manner of wetting paper.

After deciding the number of times a quire should be wet, —lay a clean wrapper on the wetting-board, on which lay a few dry sheets of the first quire. This done, draw the remainder of the quire through the water, and, laying it on the few dry sheets left on the board, turn up the bottom corner with the left thumb, and count the number of sheets that will make the first portion of the quire, and open it out straight. For instance, if a quire is to be wet twice, it will be two portions of twelve sheets each, there being twenty-four sheets in the quire; if wet three times, count eight sheets in a portion; if four, six sheets, and so on. This will make the heap regular throughout. The first portion of the quire being wet, proceed with the second and third, &c., and turn over the last portion of every quire, after leaving the last wet sheet on the heap, so that its back will be opposite that which is on the heap; this will break the back of the paper and make it straight. Proceed in the same way to wet the *remainder*, and observe to turn down a token-sheet every ten *quires and a half*, which being 250 sheets, is considered by *pressmen as an hour's* work, and saves counting. The whole

of the paper being wet, lay the heap in its proper place, cover it with another wetting-board, and leave it about half an hour to soak. After that time, if not in a hurry, press it with about half a hundred weight for an hour, then add as much more weight as is at hand; for the heavier paper in this state is weighted and the better. The heap, thus pressed for twelve hours, should then be turned and well mixed throughout, and again pressed the same number of hours. If it be wanted in a hurry, screwing it down between the wetting-boards, in a standing press for a short time, will forward it considerably.

If the heap be too wet, putting dry sheets between every four, five, or six wet ones, and pressing it in a standing press, will materially improve it. If too dry, sprinkling about every half quire or so, and pressing as above, will also be found advantageous.

It may be observed, in conclusion, that, in wetting paper, drawing it through the water slow, without draining it afterwards, will make paper much wetter than if drawn through the water quick and then shook, even though it be wet the same number of times. But, of course, the pressman must decide when one method should be adopted in preference to the other.

Cards are wet singly, by simply holding both hands in the trough and shuffling them under water, out of the left hand into the right; after which they are straightened and pressed. Cards which are too spongy to bear this, may be held tightly at one end while the other end is put in the water and opened quickly by flirting the edges; this done, the wet end is held tight while the other end is opened in a similar manner. They are then pressed, but with only a light weight.

The paper being wet, attention is next directed to the roller intended for use; and this leads me to notice the manner of

### PREPARING ROLLERS.

For *working* a forme well, much depends on the state of *the roller.* It should be perfectly dry, and yet have sufficient

suction to take a necessary quantity of ink without smearing the outer edges of the type, which always looks bad. In short, a roller that will not retain ink, when in contact with the forme, is unfit for use, and should be either replaced with another, or the work be delayed till it is washed and in order. That such delay may be avoided, however, it is necessary that the state of the rollers should be examined and prepared before a forme is ready for press.

Rollers may be unfit for working from several causes, for some of which it is difficult to account. If, however, they be kept in a dry situation, out of the sun, where the air freely circulates, an unknown cause of a roller not working will not frequently occur. Amongst the principal causes for bad rollers are, first, being too hard, which may arise from having too much glue in the composition, being too old, or being too cold; second, being washed and kept out of use too long, which produces a kind of skin over the face; third, being used too soon after being washed; fourth, being dirty and too long in use without cleaning, &c.

The first cause will require the roller to be recast, and the ingredients, of which it is made, brought as near as possible to the proportions which will, by-and-by, be recommended. If, however, it be too cold from the effects of the preceding night, a few turns before the fire will obviate it. Passing the roller quickly through the flame of a candle, or the flame of a sheet of paper, is an excellent mode of putting on a new face.

The second cause will be obviated by rubbing the roller with a damp sponge, five or six minutes before it is wanted.

The third cause will require the roller to be hung up again, or, as before noticed, turned at a moderate distance from the fire, until it is properly dry.

The fourth cause must be obviated by the roller being cleaned, which may be done two ways, namely, by washing or scraping. It must depend upon circumstances which should be preferred. If the roller be getting hard, it is the *best to wash it, in* the following manner:—first let it be well *rolled in dust, (if* there can be as much scraped up in all the

office to do it,) and then washed off with a piece of woollen cloth and clean water. This method is much better than using lye, and preserves rollers from cracks much longer. But if the roller be nearly new, or wanted for use immediately, the best way to clean it will be to scrape it. This may be done either with fresh lard or with common ink, by taking a quantity on the roller and scraping it clean off. After this, it should be rolled on a dry sheet of waste paper, till its ends are perfectly clean. This done, it is then ready for use.

If the roller be only wanted for a rough job, such as posters, &c., of course, it will not require that care and attention which it does for the finer description of work.

Before leaving the subject of rollers, it may not be improper to return to the first named cause of rollers not working, viz. being too hard. The remedy being re-casting, will necessarily give occasion to notice

### CASTING ROLLERS.

And here it may be observed, that nothing has contributed more to improve the art of printing than composition rollers, for without them the printing machine itself would be imperfect, and the press-room be still filled with the offensive effluvia from capping pelts. With rollers, fine work also is equally improved, for ink-cylinders, which give out the required quantity of ink with the greatest regularity and insures a proper colour, without them would be useless.

The mould, in which composition rollers are cast, being familiar to every practical printer, young and old, it is unnecessary to describe it. Few offices being without one of some description, it may suffice to observe, that that mould appears to be the best which is made in two parts and is accurately fitted and adjusted to each other with screws and flanches; the inside being turned and polished, gives an excellent face to every roller cast in it. To know the several ingredients which make the best composition is *of far more* consequence to those whom this little Every-Day

book is designed to assist, than to know of what material the mould is made. If the rollers be good, it is of little consequence whether the mould be made of brass, iron, or tin.

The quality of the composition, then, being the most essential, I may observe, that the proportions of the component parts which experience has tested and deems the best, is, two pounds and a half of the finest glue to six pounds of the best molasses, to which is added a half or three quarters of a pound of Paris-white, and a penny-worth of neats-foot oil. These proportions incorporated together according to the following directions, will make excellent rollers, and, with care, last several months. The glue provided, break it into small pieces and put it to soak for about six or eight hours in the bottoms of ale. This is much better than water, as its tendency is to promote the adhesive quality of the glue. This being done, put the glue into a sieve to drain for a short time, after which put it into the melting-pan, (which, I need hardly say, is like a glue kettle) and place it on the fire. When it is perfectly melted, add the treacle, and let them boil together and be well stirred for about three hours. Adding, then, the Paris-white (which should previously be made as fine as possible,) in small quantities, it will be necessary to keep stirring the composition until all be thoroughly incorporated, which may take, perhaps, about an hour. It will be then ready to pour into the mould. As it is necessary to oil the inside and prepare the mould before pouring the composition, this must be done, and the mould placed before the fire to warm while the composition is boiling. The mould being warmed, pour the composition slow, the better to expel the air and avoid the holes consequent on it being confined, and let it stand till it is perfectly cold. The best way to cut the superfluous composition from the ends, after taking the roller out of the mould, is to encircle them with a piece of thin cord, and pull each end till it cuts through the composition. Hang it up out of the sun till the following day, when it will be fit for use.

*As composition* balls are used for small jobs more from *choice than* necessity, it can only be necessary to observe,

that the same proportions will make balls equally as good as rollers. Those who choose balls for small formes will know well enough how to make them, while those who do not know will neither know their loss nor be likely to inquire. Whether the forme be large or small, with a good roller, there will be no difficulty in working it. Hence my reason for deeming further notice of balls unnecessary.

In re-casting rollers, it is necessary at all times to add fresh ingredients, but in what proportions must, of course, depend upon the state of the roller requiring it. This necessity arises from the quality of the composition being materially deteriorated by frequent meltings. If, then, the roller be too hard, more treacle and a little less glue may be added to the old; if too soft, a little more glue may be all that is necessary;—but if right when re-cast, let the proportions be half the quantity of that given for new rollers. In any instance, however, a little Paris-white should not be omitted, as it is that which binds the whole together.

When rollers, in working, show an appearance of grease and make friars, a mixture of spirits of turpentine and water, or a little pearl ash lye, will greatly improve them. If they be too soft, once washing in spirits of turpentine will harden them.

The rollers being prepared, let the ink-table be next washed, that it may be dry before the forme is ready for press. For no forme can reasonably be expected to work well with an ink-table on which there is dirty ink and dust.

### MAKING-READY A FORME

Is decidedly the most important and the most difficult part of a pressman's duty; and requires sometimes, for fine work, considerable patience. Excellency in this consists in laying the sheet on the tympan straight, so as to have an equal margin when pulled, and in making the impression perfectly even. Otherwise, the impression would exhibit a variety of shades, and be as offensive to the eye as it is to taste, whatever pains might be taken to keep the colour regular. But *a forme once* made-ready properly needs no alteration, and

but little attention, afterwards, except from the person who rolls. The only requisite is a good eye, and a little practice, which will enable any young pressman both to see the inequalities of the impression and to keep a proper colour.

The first thing in making-ready a forme is, that it be exactly in the centre of the press-table and platten, so that the piston, to which the platten is screwed, will fall perfectly in the centre of the forme, when the bar-handle is pulled. To do this is very easy, it only being required to put the forme the same distance from the tympan as it is from the edge of the press-table next the platten; to the nick on the front edge of which it is to be adjusted. This done, fasten the forme on the press-table. If it be a small one, it may be done with two empty folio, quarto, or octavo chases, according to its size, by putting one on each side and locking it with quoins against a side-stick. If it be a large one, quoins only will be necessary to fasten it against the side irons.

The forme being fastened, the tympan-sheet is laid on it, and adjusted as near in the centre as possible, when the tympan is damped a little, to make the sheet stick, and then pulled. The corners of the tympan-sheet, thus brought up from the forme, are then pasted fast to the tympan, and such blankets put in the inner tympan as will suit the nature of the forme. For instance, if it be an ordinary job, the jobbing-blankets are used, but if a half-sheet or a sheet of twelves, those blankets which are of a finer texture, called twelves' blankets, and used for nothing else, are put in.

Thus far, if the mere folding of the sheet before it is laid on a book-forme be excepted, in making-ready, all formes are alike, but how they should be proceeded with, must, of course, depend upon circumstances. If the job to be worked be only an ordinary one, by putting on and cutting out the frisket, (which has been previously pasted,) a little overlaying, and regulating the pull, it will be ready to go on with. But if the forme be a half-sheet or sheet of book-*work, a little more* care is necessary, and requires one or two *other things to be* done before it is ready to go on; such as

putting on the points, getting register, in-laying, &c. Suppose, for example, the forme be a half-sheet of twelves, the tympan-sheet, of which, after being folded into sixes, and laid by the creases to the long and short crosses and pulled, is pasted on the tympan as above. The proper blankets intended for use also being in their place, the points,* which differ from those used for octavo, quarto, &c., are screwed exactly on the upper crease of the tympan-sheet, so that the spurs of the points will be at equal distances from the outer edge of each side of the impression, and fall in the groove of the thick cross-bar of the chase. As these points are required to be exactly of a length, it is best to measure both from the spur to the outer edge of the impression on the tympan-sheet, and adjust them to each other accordingly. If this be properly done, and the furniture in the forme be exact, the register also will be exact with little trouble. The points being adjusted, pull, before the frisket is cut out, a slip-sheet or set-off sheet, without rolling, and back it, by putting the hole made by the near point on the off spur, and that made by the off point on the near spur. If the register be not good, make it so, by altering the points, or moving the forme a little, to suit the necessity of the case; or by slacking one square, and locking up the opposite one tighter, which may, perhaps, do better than either. Having now got register, take an impression on the frisket, which has previously been pasted, and cut it out with care. The advantage of getting register of a half-sheet before the frisket is cut out, is, that it obviates the probability of having again to cut the frisket for bites, which is a necessary consequence of the forme being moved to get register after the frisket is once cut. It is now necessary to examine the impression; for this purpose another slip-sheet is laid exactly to the tympan-sheet and pulled, and the impression examined accordingly. This sheet will, perhaps, exhibit places where

* Proper twelves' points are represented by two sides of a square, at the end of one of which is the spur, and on the outside of the other a flanch, by which it is held to the tympan by the screw attached to the tympan for that purpose.

the impression is more or less heavy. Cutting out of this sheet every place where it is so, put a little paste on the four corners, and fix it, for the present, exactly on the tympan-sheet. With this sheet on the tympan, pull now another sheet, and also cut out of that the heavy parts, and again put it, with a little paste on the corners, on the first sheet which is already on the tympan. One or two sheets cut in this way will make the impression perfectly even and uniform, except the tympans and blankets be unfit for the work. The thickness of the sheets used for this purpose must, of course, depend upon the state of the impression pulled, of which the pressman only can judge. Some formes requiring much thinner sheets to bring the impression even than others, it is in judging correctly, and in using sheets of a proper thickness for this purpose, that the art of getting an even impression consists. For, if any part of the impression only requires a sheet out of a ream weighing twelve pounds to make it perfect, it is obvious, that to use a sheet out of a ream weighing eighteen or twenty pounds, would make that part heavier than the rest, and consequently all the other parts light. Practice and observation, however, are the only things by which this art can be practically attained. The impression thus perfected, the several sheets which have been pasted one over the other are now taken from the tympan-sheet, and pasted by the top corners, next the forme, inside the tympan, so that the various parts already cut out may fall exactly over the places where they are intended for. Replacing the blankets and the inner tympans over these sheets, the forme may now be rolled, and an impression pulled on one of its own paper. If any other trifling inequalities appear from the impression of this sheet, overlays of thin paper pasted on the tympan-sheet will perfect it. The pull being now regulated according to the nature of the forme, by screwing or unscrewing the connecting-rod, the forme, if the points used have springs, is now ready for working. If they have not springs, the best substitute is a piece of page-cord wrapped round the point-screws and taken and brought *across* the tympan, so as to fall within the margin of the

thick cross-bar. This, acting as a spring, also throws the sheets, when pulled, off the points, and thus insures good point holes. The only difference between making-ready a sheet and a half-sheet, whatever be the number of pages on a sheet, is, that the register of a sheet is not made till the inner forme is off and the second or outer forme is laid on, whereas the register of a half-sheet is made in making-ready, before it is gone on with.

But if the half-sheet of twelves, which I suppose to be now made-ready, consists of stereotype-plates, the process of getting it ready will be somewhat different. For instance, after the plates are put on the blocks or risers, at equal distances, they should be marked, that they may be better detected, if they move. This done, the proper blankets are put in the inner tympan, and, without rolling, an impression pulled, before the tympan-sheet is laid. By the impression of this sheet, such plates as are found low are raised by under-lays of paper, of various thicknesses, being put under those parts of the plates on the blocks which come off light. This done, a second sheet is pulled for the same purpose, and again adjusted in the same way, until a tolerable impression is exhibited. The forme is now ready for the tympan-sheet, but before this is laid, ascertain whether any of the plates are moved from the places on the blocks before marked. Satisfied that the forme is correct, the tympan-sheet may be laid, and proceeded with as before advised, namely, screw on the points, get register, pull a sheet or two, and cut out the impression, where necessary, to paste in the inner tympan, cut out the frisket, over-lay, &c.; the forme will be then ready to go on. For this purpose, the heap is lifted on the paper-horse, the bank cleared of all waste paper, and the person who is to join at press now begins to roll. Spring bearers, which are merely narrow strips of iron, a little bent in the middle and fastened across the forme to the furniture, by means of spurs on the underside, to prevent the roller from throwing picks or filling-up the head-lines of the pages, are used with great advantage for most formes except twelves. The thick cross-bar of the chase being, in

twelves, where one of these bearers should be placed, the difficulty is how to fasten it. Nor is this difficulty removed, even supposing this done by means of a hook at each end and a sliding-clasp, because there is still the points, which would, in this case, fall upon the bearer; unless, indeed, grooves were made in the bearer to correspond with those in the cross bar. Where, however, these bearers can be used, they undoubtedly should be, as every forme to which they are fastened will work clean much longer than without them. For short numbers, of course, the same necessity does not exist; but even then, I see no reason for their being dispensed with.

### ROLLING.

This also is an important part of press-work, for unless the colour of the sheets be kept regular, the work will still be indifferent, notwithstanding all the care and pains taken to make the impression even. But it is much easier than making ready, the principal thing to be observed being to take an equal quantity of ink and distribute it well, every certain number of sheets that is pulled. With a cylinder ink-table, nothing can be more easy or certain; the quantity of ink required each taking being easily adjusted to the greatest nicety, and liable to no alteration after it is adjusted. For those, however, who are compelled to do their work well without a cylinder ink-table, the best way is to use a small roller, instead of a brayer. This will lay the ink along the off side of the ink-table much more regular than an ordinary brayer. Of course, the quantity of ink taken on the small roller, to be distributed out on the ink-table, must depend on the judgment and care of the person who rolls. Every thing being, as is supposed, in regular working order, the first thing to be noticed is the colour, whether it is too dark or too light. If it be much too dark, the ink should be taken off with a dry waste sheet; but if only about a shade or so, it may be worked off. The proper colour once obtained, *observe* particularly how many sheets the same uniform

shade is preserved without taking ink, but with merely distributing the roller on the ink-table while each sheet is being pulled, and then take ink accordingly. Thus, if I find, on comparing the first sheet, which I conceive is a proper colour, with the fourth or fifth sheets pulled, and find the fourth as near the shade of the first as can be judged, and the shade of the fifth perceptibly lighter, I should conclude at once to take ink every four sheets. It is true, however, that if a greater quantity of ink is taken on the roller, when the four sheets are pulled, than there was on when the first sheet was rolled, a greater number of sheets than four must be rolled and pulled before the colour can again be what it was at first. But taking too much ink being amongst the things which must be avoided, it can hardly be necessary again to say that it should be taken off again with a waste sheet. As, however, a proper and regular colour can only be secured by taking ink in equal quantities regularly, it is essential that every workman should be careful in rubbing it out equally, whether with a brayer or small roller, and particular in taking a proper quantity. Failing to observe and attend to these suggestions, the sheets will exhibit almost every variety of colour; sometimes too black and at other times too gray, and scarcely ever six sheets alike. I am the more anxious to impress this fact upon the young workman, because nothing can compensate, in the appearance of work, for the want of care and attention in these particulars; in short, it is these that make up the art of rolling. The forme being rolled according to the principle I have endeavoured to explain, the sheet is laid on according to the tympan-sheet, and the work proceeds, the person who rolls taking care to cast his eye over every sheet that is pulled to detect picks.

### PULLING

Being merely a mechanical operation, little need be said under this head. Putting on the sheet exactly according to the tympan-sheet, flying the frisket without moving the sheet, *rolling in* the press-carriage, and pulling home the

bar, is all that is required from the pressman who pulls, and is far inferior, in point of care and attention, to rolling. Of course, the press-carriage must be rolled out again, or the operation could not be repeated. The only care necessary in pulling is in keeping the sheets straight, in minding they do not slip, and in observing any pick whilst throwing off the sheet. At pulling, therefore, he is considered a good workman who can do these things certainly and expeditiously, and keeps his companion who rolls fully employed. This, however, must depend on the nature of the work, because finer the work is and more care it will require, both in rolling and pulling. The only general rule, therefore, which can be given for doing press-work well and quick, whatever be the nature of the forme, is, first, to make sure that that portion of the operation which requires care cannot be mended, and then, second, to do the remaining portion, in which more than ordinary care is unnecessary, as quick as possible. For instance, a pressman acting upon this rule would make sure of the sheet being straight and exact to the tympan-sheet in putting it on, and then fly the frisket, roll in the carriage, pull the bar, &c., as quick as possible, and again make sure, in taking the sheet off the tympan, that there were no picks. It is to this system of working that first rate pressmen are indebted for their superiority and good name among their professional brethren. The forme being off, it is hardly necessary to count the heap, provided, of course, the token-sheets which mark every two hundred and fifty, be properly turned down when the paper was wet. When, therefore, a necessity exists for disregarding the token-sheets, the pressman himself must decide. The forme is now washed, and, unless ordered to stand, ready for distributing.

It only remains now to notice

### PRINTING IN COLOURS,

Which, though much neglected, deserves the attention of every pressman. It is true that ingenious artists of the *present day have* exhibited much skill in illustrating works

of history, &c., and have shown wonderful genius in publications professedly connected with the fine arts; but as far as regards the average printing of the day, it is certainly neglected. This may be easily accounted for. To print in two colours occupies more than twice the time necessary to print in one; and it also requires more skill and ingenuity. These, unfortunately, must be paid for; and this pecuniary consideration is sufficient to banish from us this beautiful art. In the bustle and competition of the present day, time is money, and blue and gold, scarlet and green, give way to the equally useful but infinitely less beautiful uniformity of unredeemed black. To country printers, however, some knowledge of colour-printing must be of infinite advantage, as by a judicious use of colours, they may create an unlimited variety in job-work.

Except in the execution of works of a very high order, and the imitation of intricate and delicate patterns, printing in colours requires no addition to the ordinary accomplishment of printing, other than considerable ingenuity and a little practice in preparing the colours. The latter may, it is true, be purchased of the ink-maker prepared for use; but the charge for them is enormous, and they require constant replacement, whilst it is not possible to have on hand every variety of tint. By the purchase of the most simple materials from the oil shop, the ingenious printer has at his hand every colour that fancy can require, at the most moderate cost, without waste or delay. The appliances are few and cheap:—a muller, a marble slab, and a palette-knife; the materials, a can of printers' varnish, to be purchased of the ink-makers, which will keep any length of time, and the raw colours hereafter given, which may be purchased from time to time; care, however, being taken that they are of the best quality, or they will fade and turn rusty in a short time, and be a deformity instead of an ornament to the work. If necessity forces the use of painters' common varnish, about a quarter of a pound of soft soap should be added to every pound of colour, as this will keep the heavy bodied colours much longer suspended in the varnish, and consequently will not become so soon hard.

Useful tints of RED may be prepared of orange lead, vermillion, burnt sienna, Venetian red, Indian red, and lake vermillion. The pale vermillion is best for a bright tint, as the dark, when mixed with varnish, produces a dull red. Orange lead and vermillion ground together produce a very bright tint, which is more permanent than vermillion alone. The cheapest red, perhaps, may be prepared with orange mineral, rose pink, and red lead.

YELLOWS are prepared with yellow ochre, gamboge, and chromate of lead. Of these, the brightest is the chrome; yellow ochre, when mixed with the varnish, produces a very dull tint, but grinds easily, and is a good colour where a dull yellow is wanted.

BLUES are made from indigo, Prussian blue, and Antwerp blue. Of these, indigo, though exceedingly dark, and not very easily lightened, is a powerful and serviceable colour, if not required bright. Prussian blue is a very useful and excellent colour, if ground perfectly smooth. This colour dries quickly, therefore will require the roller or ball to be cleaned frequently. Antwerp blue is very light, and makes a nice bright smooth ink with little trouble. The shade of any of these may be varied with white lead.

GREENS may be produced from a mixture of any of the blues and yellows, as gamboge, which is a transparent colour, and Prussian blue, or chromate of lead and Prussian blue. These may be mixed in any proportions until the required tint is produced; but it must be remembered that the varnish has a considerable yellow tinge, and will produce a decided effect upon the mixture. With a slight portion of Antwerp blue, it will, without the mixture of any of the yellows, produce a decidedly greenish tinge. From verdigris and green verditer, greens may also be produced.

PURPLES of any degree of richness are made by judiciously mixing reds and blues.

Sæpia produces a nice brown tint, burnt umber a very hot brown, raw umber a much lighter brown, bistre a brighter still. Neutral tints may be obtained by mixing Prussian *blue, lake,* and gamboge. In fact, every pigment that *painters can use* can be used in printing, avoiding, as much

as possible, all heavy colours. In truth, if the printer is desirous of imitating any particular colour, or of producing any particular tint, he cannot do better than consult the nearest artist in oil or water colours (oil in preference) or in default of that, the neighbouring house-painter.

It is desirable that every colour should be ground perfectly smooth, otherwise the forme will be liable to clog and make the impression thick and imperfect; bestowing a little time and labour in grinding every colour, therefore, is of the greatest importance; indeed, no colour will work clear without it.

The necessary colours having been procured, the method of preparing them is very simple. Each must be well ground by the muller upon the slab, even although they may have been purchased well powdered. The colour should then be well mixed with the palette-knife with the varnish, until the pigment has attained the required consistency, which will vary with the quality of the work to be executed; for if it be a posting-bill or coarse job, the ink should be very thin, and consequently a much larger proportion of varnish should be used. If, however, the work be a wood-cut or in small type, the pigment should be made as thick as possible. If the colour required be a compound, the predominant tint should be first mixed with the varnish, and the lighter tint added in small quantities until the exact shade required be produced. Thus, if the colour be a dark green, the blue should be mixed up first, and the yellow added; but if it be a very light green, then the yellow should be first applied, and the blue added. If the tint desired be exceedingly light, it will be found that the quantity of raw material to be employed will not make the mixture sufficiently thick to be applied to the type or wood-cut; in this case whitening is added to thin colours, and dry white lead to the heavier in considerable quantities, which must be adjusted in the course of mixing. To insure thorough combination, the mixture should be scraped into a corner of the slab, and a very small portion of it spread with the palette-knife, and well ground *with the muller* until no specks or lumps appear, then scraped

up and placed in another corner. This should especially be done when white lead is used, as it will be found that every little lump when crushed will produce a white streak upon the slab. If this be not carefully done, independently of its tendency to clog the type, it will very materially alter the tint. When the pigment seems sufficiently mixed, it is better to bray it out with the muller instead of the usual brayer, and grind again each particular portion immediately before it is used. The ink should then be well distributed, and the forme well rolled. When two or more colours are employed, and they are worked at as many different times, extreme nicety in the register and justification is required, in order that each colour may fall in its just place, without overlaying one colour with another. This would be very bad in any case, but most especially where the composition of colours would produce a third; as, for instance, if any part of a blue line should unfortunately fall upon a yellow, a green outline would be the result. The best way, however, to avoid this in posting bills, is to print all the colours at once, which is easily done without much if any loss of time. The way to do this may be illustrated by example. Suppose the forme is to be worked, for instance, in black, red, and blue, and that it has been well washed and corrected, and again dry enough to go on with. The forme being fastened on the press-table, and made ready in the usual way, take out the lines to be worked red, and tack each letter, if possible, to the reglet on each side, that it can be easily lifted out at once. If this cannot be done, on account of the lines being in metal, tie up each with thin cord, and take care to begin to enclose each line, with the reglets, at the bottom of the shank of the type, and wrap it perfectly straight nearly the height of the reglet, so that it will lock up and lift like any other line. If this be done properly, there cannot be more than one thickness of cord in the whole height of the reglet on either side of the line, consequently, will not be liable to get off its feet. This done, paste a slip of paper *on the bottom of* the line, which will make it more compact *while the forme* is being worked. Should the line require

overlaying, paste them also to the bottom as underlays. The red lines being now ready, proceed in the same way with the blue lines, and make them also as they will lift like so many lumps of metal or wood. Tightening now the remaining portion of the forme, by pressing the quoins up tightly with the fingers, roll it over with the black. If all the lines be properly justified, there will be no difficulty experienced from letters rising. Roll now, also, those lines, which have been taken out and made to lift easily, with their respective colours, replace them in their proper places in the forme, and again tighten all the quoins. The sheet being now pulled, is not only perfect, but is exact, which no other system can improve. This being done, the quoins are again slackened, the different lines taken out and rolled with their own colours, the forme on the press again rolled with black, the lines replaced, the forme quoined, and again pulled, which is continued, of course, till the forme is off. If an objection be raised to this system, on account of the apparent loss of time in taking out the lines every time the forme is pulled, it should be recollected, that in this there is only one making-ready, while in working the colours separately there are three; that the frisket is only pasted and cut out once, instead of thrice; that there are no points used, and that the sheet is only once put on and once taken off the tympan; and that the sheet is only once pulled; whereas, by the other system, every sheet goes through the pressman's hands and is pulled three times! But even allowing that three colours may be worked, by underlaying the lines with nonpareil reglet, and each colour worked separately, in the same time, still the method which I have endeavoured to explain has a decided advantage, in the accuracy with which every coloured line falls in its proper place.

For those, however, who wish to work in different colours, Mr. Rider, of Liverpool, has invented a roller, which promises peculiar advantages. I have not seen it, but if what I understand be correct, with his roller, the various colours may be all rolled on the forme and worked at once. The *plan is, to have* as many boards or marble slabs as there are

colours to be worked, each board or slab to have one colour and to be the width of the lines to be printed blue, red, black, &c. The boards or slabs provided, each separated by a thin reglet and fastened on the ink-table, a portion of each colour may be put on each slab, in the order intended to be printed. This done, it will be necessary to put as many small rollers as there are colours on a roller-frame, sufficiently large to pass over the whole bill, from top to bottom, and ivide each by a circular piece of tin, about the eighth of an inch larger than the circumference of the rollers. The roller rod also passing through these pieces of tin, which will project above the surface of the rollers, there will be no difficulty either in taking the different coloured inks together, or rolling them on the forme at once, inasmuch as the tin projections will fall between the slabs, and the lines in the forme, separated by the reglets. Of course, the projections must be always placed between the same slabs when distributing, and the same lines when inking the forme. If there be any objection to this plan of working all the colours at one time, it is, perhaps, the great number of various sized rollers, roller-frames, and inking-slabs that would be necessary to make it at all times available. For, certainly, it would not often happen that all the lines to be worked in different colours would be either in the same place or of the same depth. I think, however, if this objection could be removed, the plan would be excellent.

To print landscapes, &c., and other delicate subjects, in various colours and shades, requires superior individual skill and ingenuity as an artist as well as a printer. It will, therefore, be sufficient to state, that the lighter and more extensive tints, and especially those in which transparent colours are used, are worked first, the colour being gradually deepened by successive blocks, until the required effects are produced; and that the outline is printed last, to give sharpness and finish to the design. The curious reader is referred to Mr. Savage's beautiful work on Decorative Printing, and to the many admirable productions of Mr. Baxter and Mr. *Vizetelly*. *Mr. C. Knight* has taken out a patent for a new

process in printing in colours, the principle of which consists in a new mode of obtaining register of the different colours. It is understood that all the colours are printed before the sheet of paper is taken from the tympan, but not at one impression.

### PRINTING IN GOLD.

There is no difficulty in printing in gold; it is within the power of any typographer. The type is composed and made-ready at press in the usual manner. A quantity of raw or burnt umber is mixed with printers' varnish, to the same consistency as it would be were it intended to be used as ink; but this mixture is then compounded with a considerable quantity of gold size, the same as that used by gilders and japanners. The first mixture is necessary, because it has been found that the umber will not combine with the size. The type is then rolled with this compound, in the same manner that ordinary ink is applied, and the impression is taken upon the paper. Leaf-gold is then laid over it with a piece of wool, and pressed slightly upon it. When the varnish has had time to set, a piece of wool is rubbed roughly over the part printed, and the superfluous leaf is thereby removed, leaving the gold adhering to the varnish. The sharpness of the print will vary with the judgment of the printer in the quantity of sizing applied to the type; for if the press-work be bad, the print will be bad also. For inferior gold-printing, bronze powder is extensively used. For this the varnish is made very much thicker than for gold; the method of printing is the same; but after the impression has been given, the powder is brushed over the print, and will adhere thereto, whilst the superfluity may be easily removed. In printing the golden Coronation Sun with this powder, a very distressing disease arose, the hair became perfectly green, and the men were very seriously affected; great caution should, therefore, be taken, that particles of the powder be not allowed to fly about the room. Dutch *gold cannot be* used as a substitute for gold leaf.

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| Above 500 and under 700, 4½d. | Ditto, prog., 5d. |
| If 700 or 750, 5d. | Ditto crown, size Rider, 5d. |
| All above 750, 4½d. | Octavo foolscap, 20 wide, 24 long, cal. and prog., 5d. |

N.B.—Side notes to be reckoned in the width, bottom notes not to be regarded.

Works on royal paper to be paid one halfpenny per hour more than the above prices.

Ditto on foolscap or pot, not less number than one thousand, and worked at one pull, 4½d.

Ditto in square pages (like Entick's dictionary) and works for the public offices, to be advanced one halfpenny per hour on the scale of 1800.

Fine paper of the same size, if included within the token, not to be charged extra; but if of a larger size, then to be paid according to the scale.

Three or more proofs pulled at one time to be charged 4d. per forme; and if made ready, to be charged as a token.

Cards, large or small, to be paid 6½d. per hundred.

Double crown or royal broadsides, not exceeding 100 number, to be paid 1s. 9d.; if more than 100, to be paid 1s. per 100.

Jobs, without points, to be paid 4½d. per hour.

Demy broadsides, not more than 100, to be paid 1s.; above 100, and not exceeding 500, to be paid 10d. per 100; if above 500, to be paid after the rate of 1s. 9d. per token.

Broadsides requiring three pulls, to be paid one-third more.

No forme to be deemed a broadside that comes in at one pull at the common press.

Night work to commence and be paid for from 10 o'clock till 12, 1s.; all after to be paid 3d. an hour extra till 6.—Morning-work, commencing at 4 o'clock, to be paid 1s. extra. Sunday work, if not exceeding six hours, to be paid 1s.; if for a longer time, 2d. an hour.

### LIVERPOOL PRESS-WORK PRICES

Are the same as those of London, but only for common work; fine work is paid for as may be agreed upon between the employer and the employed.

## CHAP. II.

## MACHINE-WORK.

MACHINES IN GENERAL,—ROLLERS,—MAKING A FORME READY,—WORKING-OFF, ETC.

As long as the thirst for literature was confined to books and a few periodicals of limited sale and size, the ordinary printing presses sufficed to supply the demand; nor was it discovered that any further speed was requisite, until the increased facility of conveyance, and the important events at the close of the last century, created a demand for news, that the utmost exertions of printers were unable to supply; for the attempt to increase the speed by the composition of two distinct formes of type would avail little, so long as the presses could turn out only two hundred and fifty or three hundred sheets each per hour. Accordingly, for this branch of the profession were the first machines projected. Many schemes were proposed for accelerating the movements of the press; but the first attempts at anything like the machine afterwards introduced were made by W. Nicholson, a gentleman connected with periodical literature, who took out a patent about 1790, for a printing machine, of which the chief points were the following:—The type was to be fixed upon a cylinder, being cast narrower towards the bottom, in order, as it were, to radiate from the centre of it. This cylinder, with its type, was to revolve in gear with another cylinder, covered with soft leather; an inking apparatus was applied to the type-cylinder, and the paper was to be impressed by passing between the two; most of these plans were, when modified, adopted by after-constructors. This

machine was never brought into practice. König, an ingenious German, was the next who undertook to construct a machine; and, having made considerable advance in his plans, obtained a contract with Mr. Walters, the proprietor of the Times newspaper, for manufacturing two for that journal. In these, Nicholson's plan was so far altered, that the type was laid upon a flat surface, and the impression was given by their passing under a cylinder of great size. He afterwards invented a machine in which the sheet was printed on both sides before it left the machinery; but, in both, his arrangements for the equal distribution of the ink were so complicated and clumsy, consisting of not less than forty wheels, and the works of every part of the machine so intricate, that it never came into practical use. The first really useful machine was constructed by Messrs. Applegarth and Cowper, being an extensive modification of that of König; its principal improvement consisting in the application of two drums between the impression-cylinders, for the purpose of insuring the register of the sheet, by retaining it, after the impression of the first forme, just so long that it may pass on to the second cylinder in exact time to be impressed thereby upon the second forme; and of the distribution of the ink upon a plane surface, instead of by a complication of rollers, by which König's monstrous machinery was got rid of. These machines are now in general use.

For newspapers, machines are generally made to work but one side at a time. It is manifest that a machine will work a much greater number (more than double) of one forme than of two; and that the machinery will be lighter and less expensive, and of course require less motive power. One forme, therefore, of a newspaper, containing advertisements and the less important matter, is worked at leisure; and the second forme, containing the leading article, important news, and other matter of consequence, is reserved until the last moment, and is then thrown off with immense *rapidity*. For the usual description of book-work, machines *are constructed* to work both formes. In these, perfect

register and the exact and even distribution of the ink, are of the greatest consequence, and such immense rapidity is not necessary. These machines, therefore, differ very much in construction, though not in principle, from those used for newspapers.

The ingenuity of Messrs. Applegarth and Cowper, especially of Mr. Cowper, has been exerted in the invention of many mechanical improvements in printing. Several of his machines, upon various constructions, have been brought into use with considerable success. The machine, however, with which the Times is worked, which consists of four impression-cylinders, two of which are in contact with the types at the same moment, and gives four thousand two hundred impressions within the hour, with four hands laying on and four fly-boys, and the other less complicated machines in more general use, which give two thousand impressions within the hour, are the principal machines of his invention. The above gentlemen at first, it is believed, turned their attention to the fixing of stereotype-plates upon the periphery of the impression-cylinder, and brought the scheme into practice; but these are superseded by the simpler and more useful machines above noticed.

The machines of Mr. Napier are in very general repute. They have the advantage of being easily worked by two men, thus saving expense and unavoidable dirt where a steam engine is employed, with its necessary appliances, boilers, coals, &c. They stand in a very small compass, and do very fair work. As far as regards motion and impression, they do not greatly vary from those previously noticed; but in the method of conveying the paper, obtaining register, and inking, they are altogether different. Mr. Napier has constructed several other machines of great merit, one of which, for newspapers, will perfect two thousand sheets per hour by the labour of two men. Another with four cylinders, for rapid newspaper work, prints the Morning Chronicle newspaper, at the rate of six thousand sheets on one side per hour. But the perfection of speed will be obtained by one for which he has sometime since taken out a patent, by

which the extraordinary speed of fifteen or twenty thousand per hour will be obtained. The ordinary type is affixed to the periphery of a cylinder of enormous dimensions, in contact with which ten smaller impression-cylinders revolve, each with its inking and other apparatus so arranged that every revolution of the large cylinder works ten sheets of any size; and yet so steady and so silent is its motion, that there is no danger of any disruption of the type, even at that extraordinary rate. The types are held in their place by means of the rules, which are made considerably larger at the top than at the bottom, thus occupying the space which would be found in consequence of the types not being so formed as to radiate from the centre of the cylinder. Mr. Napier is the inventor of many very ingenious improvements in the machinery of printing.

Mr. Rowland Hill has brought into partial use a machine giving ten thousand impressions per hour; the types are slightly pyramidical, in order to radiate from the centre of the cylinder upon which they are fixed. These machines, however, are better adapted for printing stereotype-plates, to which a curved form could be given, which is the principle of Nicholson's and other early machines.

Another machine-press has long been at work in Mr. Spottiswoode's office, in which the impression is given by a self-acting platten, tables, rollers, friskets, and tympans. It does very good work at the rate of six or seven hundred impressions per hour.

A new Plane Printing Machine, invented by Count Rosen, and now in operation in Messrs. Clowes's office, is adapted for all kinds of book-work, and may be worked either by hand or steam-power. It is capable of doing the work of two common presses, requiring a superintendent, and two boys to lay on and take off the sheets, and lower and raise the tympan. The simplicity of its construction cannot fail to recommend this machine to the favour of the trade, as it may be managed by a common pressman—the making-ready not differing much from his usual method. *The inking apparatus* is very cleverly arranged, the distri-

buting rollers having three or four different motions; the table, on which the type is placed, though remaining stationary when in work, has the elasticity of the wooden press; and the use of tympans enables the workmen to dispense with blankets, so as to produce the finest impressions from wood engravings. When in action it makes very little noise, and may be stopped at any moment required. The space occupied by the machine, exclusive of the turning-wheel, is not greater than a press of the same capacity (double crown) requires, but the cost is nearly fourfold. Of course, this machine is chiefly available where a large number of impressions are required, or greater despatch than ordinary; as, for small numbers, too much time would be occupied in making-ready, to render it equally economical.

A well-seeming press has also lately been imported from America, in which there is an admirable application of two friskets, which are made to run in and out and rise and fall alternately. The tympan is upon the platten. There appears, however, to be some practical defects in the working. Owing either to this or their high price, or prejudice, they have not been successfully introduced.

These are by no means all the machines that have been devised, constructed, or brought into use. They are, however, all that is necessary to mention, as the same principle is common to all. Every maker is at liberty to build them, with such modifications as his own talents may suggest.

As these machines are always put up and got in working order by persons especially appointed by the makers, it is not necessary that either pressmen or machine-men should know how to fit all the parts together; it is sufficient for them to know how to work them. Though, of course, this is much different to working at press, yet it is not so much so as to incapacitate a pressman for doing it; the fact being, that there is nothing like the skill and ingenuity required to work the machine as there is to work at press. In short, any pressman can work at a machine; but a machine-man, who has not been used to press, can only work at that to which he has been brought up.

In noticing, then, the difference which characterize the machine, it may be observed, that the composition

ROLLERS

For machine-work are generally made a little harder and tougher than those used by hand at press. This is done to obviate the possibility of the composition being stripped from the roller-stock, when the machine is in rapid motion, as well as to counteract the effects of the friction and the warm air which is always engendered, more or less, in a machine-room, particularly when the motive power is steam. A little more glue, however, added to the proportions already given for composition rollers [see page 90] will make the necessary difference. Machine rollers are also much longer, and some much thinner, than those in ordinary use at press, but, as the moulds in which they are cast are always supplied with the machine by the makers, further notice is unnecessary. The are easily put to and taken from the machine.

MAKING-READY.

Machines, as before observed, being principally used for working-off newspapers in single formes, my remarks on making-ready must be understood to refer entirely to that branch of the profession. Indeed, after the cylinder of the machine is properly adjusted, so as to give a proper impression, it can hardly be said that further making-ready is ever required. A tympan-sheet is unnecessary; and the frisket is altogether dispensed with; the blanket fastened to the cylinder answering for the first, and the endless tapes adjusted to the margin of the paper supplying the second. The first thing, then, in getting ready to work at a machine, after the forme is corrected, is to make it fast exactly in the middle of the machine-table. This done, and the endless *tapes adjusted, if* the machine has not before worked a news *forme, a* waste sheet should be passed under, as well to

ascertain the state of the impression as the quantity of ink. If the impression be too heavy at either end, raise that end of the cylinder by means of the screw adapted for the purpose; but if too light, regulate the cylinder accordingly, by letting it down a little by the same means. By these screws, the impression-cylinder may be adjusted to a mathematical nicety; and made to produce the impression required. The cylinder once adjusted, requires no alteration; and, unless from some unforeseen casualty, will work every successive publication for months. Does the inking apparatus give out a proper quantity of ink, should next be ascertained, as this is also regulated by screws, and may be adjusted to give out regularly little or much. This, also, being once adjusted, needs no alteration, unless, indeed, some circumstance occur which the machine-man thinks requires it. That the forme may fall exactly in the middle of the sheet, there is a wooden slide near the web, against which the sheet is laid, which is adjusted and made fast by a screw If, therefore, the margin at the off side of the paper be too much, this slide the machine-man moves nearer to his body, but if two little, it is fixed, of course, further off. These several things being properly adjusted, the forme is now ready for working, unless there is some further alteration or correction in the forme. This, however, if possible, should be avoided, as correcting at some machines is very difficult, if not altogether impossible; it is better, therefore, that the forme should be corrected at the imposing-stone.

### WORKING-OFF.

If the wheel, which gives motion to the machine, be turned by manual labour, to work-off a news forme at a single machine will require two men and a boy:—one to turn, the other to lay on, and the boy to take off. But if worked by steam, one man's labour is superseded. The machine being in motion, and the person laying on, drawing a sheet from the heap, previously placed to his right, brings its near edge against the slide which adjusts the margin, and

places it straight on the web. From this the sheet is caught by nippers, within the endless tapes, and carried under the cylinder, where, of course, it receives the impression, and afterwards taken off by the boy. The forme again returning under the cylinder (one-half of which is sufficiently indented to allow it to pass under without touching the type) is brought in contact with the rollers by which it is inked; after which, the forme again returns, and receives the second sheet from the web, fixed by the putter on, and being impressed, is again taken off by the boy, which operations are repeated until the forme is off. This done, the forme is taken off the machine, and the one which is to back it put on and fastened on the machine table, exactly in the place of the first. There being no points, the register at the sides will be good in proportion to the accuracy with which the near edge of the sheet is placed, in working, against the marginal slide before noticed. The register at the head will be good or indifferent, according to the certainty with which the sheets are laid to that particular mark on the edge of the web, from which the nippers receive and convey it to the forme. Fixing the sheet, in reiteration, a little nearer or a little further from the cylinder, will, of course, make all the difference in getting the head into register. Register being got, the machine is again worked as before, the men changing alternately, first at the wheel and then laying-on, until the publication, or first edition, is off. The day after publication, the forme being again taken to the composing-room, layed-up and distributed, the machine is done with till the next publication, when the same operations are again required.

# TECHNICAL TERMS USED IN PRINTING.

BANK—A stage about three and a half feet high, placed near the press.

BEARD OF A LETTER—The outer angle of the square shoulder of the shank, which reaches almost to the face of the letter.

BEARER—A piece of wood, type height, or a piece of reglet, to bear the impression off a blank page.

BITE—Is when the entire impression of a page is prevented by the frisket not being sufficiently cut out.

BLANKETS—Woollen cloth, or white baize, to lay between the tympans.

BODY—The shank of the letter.

BOTTOM-LINE—The last line of the page preceding the signature or white line.

BREAK—Piece of a line.

BROADSIDE—A forme of one full page, printed on one side of a whole sheet of paper.

BROKEN LETTER—Is destroying the orderly succession in which the letters stand in a line, page, or forme; and mingling the letters together.

BULK—A small fall-table fixed at the end of a compositor's frame; or a small rack, on which the letter-board and forme are placed while distributing.

BUR—When the founder has not taken off the roughness of the letter in dressing.

CASSIE PAPER—Broken paper.

CHAPEL—The meetings held by the workmen for the purpose of redressing grievances, collecting fines, and disposing of their funds.

CHOAK—If a forme be not washed in due time, the ink will get into the hollows of the face of the letters; and this is called choaking of the letter, or choaking of the forme.

CLEAN PROOF—A proof having but few faults in it, and a proof that is pulled for the author, are both called clean.

CLOSE MATTER—Matter with few breaks or whites.

COVENTRY—When a workman does not conform to the regulations of the chapel, he is put in Coventry; that is, pranks are played on him, and no one in the office is allowed to speak to him, until he pay a due regard to the rules.

CORRECT—When the corrector reads the proof, or the compositor mends the faults marked in the proof, they are both said to correct; the corrector the proof, the compositor the forme.

CORRECTIONS—Letters marked in a proof.

DEVIL—The errand-boy.

DOUBLE—Among compositors, a repetition of words; also, among pressmen, a sheet that is twice pulled.

DRESSING A CHASE OR FORME—The fitting the pages and chase with furniture and quoins.

DRIVE OUT—Set wide.

EMPTY PRESS—A press that is unemployed.

EVEN PAGE—The 2nd, 4th, 6th, or any other even-numbered page.

FATHER—The head or president of the chapel.

FAT FORME—A forme in which there are blank pages, or many white lines. Pressmen call that a fat forme from which a great number of copies is thrown off.

FLY—The person who takes off the sheet from the press, in cases of expedition.

FOLIO—The figure or figures which stand at the head of the page.

FOLLOW—That is, see if it follows—This term is used as well by the corrector as by the compositor and pressman. It is used by the corrector and compositor when they examine how the beginning matter of a succeeding page agrees with the preceding page; and how the folios of those pages properly and numerically follow and succeed one another, lest the pages should be transposed or worked off wrong.

FORME—The pages when fitted into a chase.

FOUL PROOF—When a proof has many faults marked in it.

FOUNT—The whole number of letters that are cast of the same body and face.

FRIAR—That part of the forme which is not rolled, and comes off, when pulled, white; the white places are called friars.

FULL PRESS—When two men work at the press.

FUDGE—To contrive without necessary materials, or to do work in a bungling manner.

GET IN—Matter is got in in a line, page, sheet, or book, if letter be thinner cast than the printed copy the compositor sets from; or, matter is got in, if the compositor sets closer.

G. I.—GREAT INDULGENCE—When a compositor or pressman enters an office, to work in it, this phrase is used by the workmen to express their sense of the duty of the additional hand to pay off, or pay his entry. A custom more creditable in the breach than the observance.

GOOD OF THE CHAPEL—Forfeitures and other chapel dues, collected for the good of the chapel, to be spent as the chapel approve.

GOOD WORK—Whether at case or press, is that which is light and easy, and for which a good price is paid.

HALF-PRESS—When but one man works at press.

HEAD PAGE—The beginning of a subject.

HEAP—So much paper as is set out for the pressman to wet.

HOLDS OUT, or NOT HOLDS OUT—These terms are applicable to the quires of white paper, to worked off heaps, to gathered books, and sorts of letters, &c. If quires of white paper have twenty five sheets each in them, they say, the paper holds out five and twenties. Of worked off heaps, the heap that comes off first in gathering is said, not to hold out. Of gathered books, if the intended number of perfect books are gathered, they say, the impression holds out; but if the intended number of perfect *books cannot* be gathered off the *heaps, they say*, the impression does not hold out; and so for sorts of letter.

HORSE—The stage on which pressmen set the heaps of paper on their banks; also, if any journeyman set down in his bill more work than he has done, that surplus is called horse.

IMPERFECTIONS OF LETTERS—When the founder has not cast a proportionable number of each sort of letter, it is making the rest of the fount imperfect.

KEEP IN—When there is any doubt of matter being driven out beyond what is intended, the compositor spaces close to keep in.

KEEP OUT—The practice opposite to the preceding.

KERN OF A LETTER—That part which hangs over the body or shank.

LETTER HANGS—If the compositor is careless in emptying his composing-stick, so as to set the matter loosely down in the galley, and it stands not perfectly square and upright, the letter hangs; or if, after over-running on the imposing-stone, he has not set his letter in a square position again before he locks up, the letter thus out of square is said to hang.

MACKLE—When part of the impression on a page appears double.

MATTER—The series of the discourse of the compositor's copy; also, the letter, when composed, is called matter.

MEASURE—The width of a page.

MONK—When the roller is not properly distributed, and the ink lies in blotches on the forme.

NAKED FORME—When the furniture is taken from about all the sides of the pages.

ODD PAGE—The 1st, 3rd, and all uneven-numbered pages.

OFF—Pressmen are said to be off, when they have worked off the designed number from a forme.

OUT—A compositor is said to be out, when he has set all his copy.

OUT OF REGISTER—When pages are not worked even on each other.

PICK—When any dirt gets into the hollows of the letter, which

chokes up the face of it, and occasions a spot.

POINT-HOLES—Holes made by the points in a worked off sheet of paper.

PIE—When a page is broken, or when letters of different sizes are mixed together.

QUARTERS—Formes of octavos and twelves are said to be imposed in quarters, not from their equal divisions, but because they are imposed in four parts.

RAT—When a journeyman works for low wages, he is termed a rat.

REGISTER SHEETS—Sheets printed to make register with.

REITERATION—The second forme, or the forme printed on the backside of the white paper.

ROAST BEEF—When a journeyman has done more work than he has charged in his bill, and which he intends to charge at a future time, it is called roast beef.

RUNS ON SORTS—When particular sorts of letter are used in a work.

SET OFF—Sheets that are newly worked off at the press often set off, and more particularly so when rolled with soft ink.

SHANK—The square metal the face of a letter stands on.

SHEEP-FOOT—The iron hammer which is used by pressmen.

SIGNATURE—Any letter of the alphabet used at the bottom of the first page of a sheet, as a direction for the binders to place the sheets in a volume.

SLUR—When the impression of the sheets appear smeared.

SMUT—When either compositors or pressmen are employed for a short time, and not engaged for a constancy.

SORTS—The letters that lie in every box of the case, are separately called sorts.

SQUABBLE—A page or forme is squabbled when the letters of one or more lines are got into any of the adjacent lines; or when the letters are twisted about, out of their square position.

STEM—The name given to the straight flat strokes of a straight letter.

STICK—The tool in which types are set; sometimes called a composing-stick.

SUPERIOR LETTERS OR FIGURES—Types of a small face, often set to marginal notes, references, or authorities.

TURN FOR A LETTER—The shank of a letter is turned upwards and the face downwards when any particular sort wanted is not at hand. The turned letter being the same thickness, is seen and replaced when the matter is corrected.

VANTAGE—When a white page or more happens in a sheet, the compositor calls that vantage.

UNDER HAND—This phrase is used by pressmen for the light and easy or heavy and hard running in of the carriage. Thus they say, the press goes light and easy under hand, or it goes heavy or hard under hand.

UPPER HAND—When a press is easily pulled, it is said to be easy upper or over hand.

WHITE LINE—Line of quadrats.

WHITE PAGE—A page that no matter comes in.

WHITE PAPER—Though the first forme be printed off, yet pressmen call the heap white paper till the reiteration be printed.

# APPENDIX.

## IMPROVED MATERIALS.

Though it is the interest of every young workman to qualify himself to work at any branch of his profession, it is no less the interest of every employer to provide such materials, and adopt such arrangements, as are best calculated to secure all the advantages which may be realized from superior ability. For what is ability, unless it can be exercised; and how can it be exercised unless it can use proper appliances and materials?

The various improvements which have taken place in the several descriptions of printing materials, during the last few years, have greatly increased the facilities of workmen, and enabled them not only to execute work neater but more expeditious, than they could formerly. Such being the fact, every employer must be equally interested in their adoption, because it is only from the advantage arising from those facilities that one employer can compete with another. For, certainly, a piece of work may be executed much sooner and better, and, of course, cheaper, with proper materials, than it could possibly be if the workman has to fudge. The necessity to do so, indeed, is always a source of vexation to a workman, and never of satisfaction to an employer. It is true, however, that in a great proportion of the respectable printing offices in the country, that, to avoid fudging as much as possible, every improvement has been adopted as soon as known; but it is equally true, that there are other offices which are characterized by nothing but confusion, and in which every thing being valued in proportion to its age, nothing

new must enter. At least so it might be believed, when a practical printer has been heard to assert that he could make an old wooden press work a forme as well as any columbian! But who, besides himself, would believe it?

Without, however, presuming to criticise the propriety of those who prefer their materials made and arranged according to the last century, I may be permitted to notice, for the consideration of those employers whose notions are less antiquated, such recent improvements in some few materials, both at case and press, as my own experience has tested and approves. I shall confine myself, therefore, to those only which appear to deserve a special notice.

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## No. I.

## THE CASE ROOM.

### FURNITURE,—BRASS-RULE, ETC., ETC.

The principal part of the materials of a case room are not of that importance as to require either enumerating or describing. As long as there are printers' joiners, who make and supply every thing of wood, there can be no necessity to tell a printer, however young, the particular dimensions of a frame, case, frame for imposing stone, galleys, mallet, plainer, shooting-stick, &c., &c. All these things being much alike in every office, every one connected with the profession knows, better than he can be told, both what they are and what they are for. These remarks would also apply to furniture and brass-rule, where it not that custom requires a printer to exercise his judgment in determining the lengths into which both should be cut. This judgment, it must be *acknowledged*, is much better exercised by one than by *another, inasmuch* as the one will be always cutting either

new pieces or old ones less, while the other, by cutting proper lengths at first, will not only save the time and waste thus sacrificed by frequent cuttings, but will also supersede the necessity for ever after using either the saw or the shears. Such, then, being the difference, it appears to me important both to the workman and the employer, to know the principle by which such a saving may be attained. Hence my reason for selecting furniture and brass-rule for special observation. First, then

### FURNITURE.

The importance of furniture in every case room is obvious, from the fact that a portion is required for every forme. This term also includes side-sticks and foot-sticks. To enumerate the various thickness of furniture is unnecessary; my object is to show what lengths it should be, not what thickness it is. I will, however, first observe, that these lengths are peculiarly applicable to jobbing as well as to book-work; though for the last named work, I believe nothing can be equal to metal furniture.

The advantage of furniture being cut into proper lengths, in a jobbing office, is, not only the facility with which any sized forme can be neatly dressed, but also its applicability to be joined and used in jobs of any kind or size instead of quotations. In book-work, proper lengths are equally advantageous, both for blank-pages and dressing a forme. With a proper number and assortment of lengths, indeed, the advantages are incalculable; and even if there be a greater quantity of furniture required at first, those advantages will more than compensate for the extra outlay a hundred times over. This opinion is not formed from reason only, but fact, having had between four and five years experience of the benefits since I first worked out the idea, which had previously occurred to me, and adopted it. Since that time there has not, to my knowledge, been a single piece of furniture cut, except a few new pieces cut to those sizes which were deficient. The furniture then cut, which was principally old, is as good now as it was then; and, no doubt, will

remain so at least for the next generation. A few of the side-sticks, which are a little worn at the top, and which, perhaps, in a little while, it may be necessary to replace, is the only exception. But even this may be avoided with care. These side-sticks are also cut to the same lengths, and kept in the same compartments of the drawer, as furniture. All the pieces, therefore, whether narrow, broad, broad and pica, double narrow, double broad, or side-sticks, of one size, are kept together. This saves room, and answers every purpose for which it was intended, without either loss of time or confusion. That every size may be again returned into its proper place, after use, on the edge of each box is cut the proper length therein contained, which serves as a standard for each.

What particular sizes of furniture would be the most useful, must, of course, depend upon the nature of the jobs and the various sized leads in each office. But for general purposes the following sizes, cut to pica ems, will be found sufficient for every purpose; namely,

| | | | |
|---|---|---|---|
| 12 ems, | 16 ems, | 21 ems, | 24 ems, |
| 27 „ | 30 „ | 35 „ | 37 „ |
| 40 „ | 42 „ | 45 „ | 47 „ |
| 50 „ | 52 „ | 55 „ | 57 „ |
| 60 „ | 62 „ | 65 „ | 67 „ |
| 70 „ | 72 „ | 75 „ | 77 „ |
| 80 „ | 82 „ | 85 „ | 87 „ |
| 90 „ | 92 „ | 95 „ | 97 „ |
| 100 „ | 107 „ | 114 „ | 120 „ |

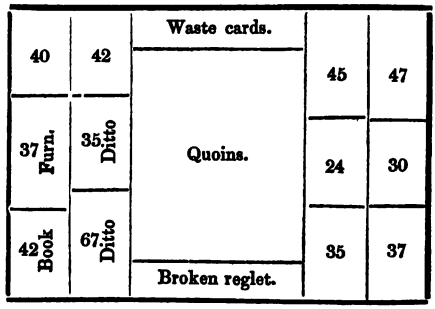
130 „ and a few lengths as they are received rom the joiners, for the largest sized posting bills. It is best to cut all the long lengths first, because what is thus cut off will, perhaps, come in for shorter lengths. It will be an advantage to cut the reglets, though kept in separate boxes, to some of the sizes of furniture, say 30, 35, 40, 47, 57, &c.

Those who wish to have their furniture thus cut into lengths, will find that a long wooden stick will make a very handy gauge for marking them exact. This may be done by *simply turning* the slide of the stick in the opposite direction, *and screwing it so* that th plain side, against which matter

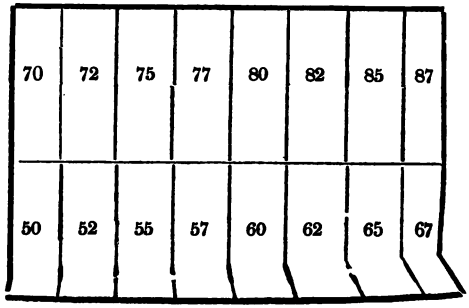
is usually justified, will be next the end by which the stick is held. The measure being thus made, each piece of furniture is put in and marked with a bodkin at the underside of the stick. There can be but little or no variation in the different pieces in one size, if they be sawed straight and exactly in the bodkin-mark. Reglet may be also cut to the four smallest sizes, and kept in the same boxes, as the furniture.

The furniture being cut, it will be necessary to have three drawers in the imposing-stone, divided into separate boxes, something like the following, thus:—

UPPER DRAWER.




MIDDLE DRAWER.



LOWER DRAWER.

<table>
<tr><td colspan="3">120 and 130</td></tr>
<tr><td colspan="3">104 and 114</td></tr>
<tr><td>18</td><td>95 and 97</td><td>21</td></tr>
<tr><td>12</td><td>90 and 92</td><td>16</td></tr>
</table>

The edge of each box being cut as a gauge for every size, and every box containing its own, the furniture may now be used to advantage. For instance, suppose the forme requires large blanks, and be set to any size in the furniture drawer, it is evident, that there can be no difficulty in making up the necessary white with furniture, whatever it be, providing, of course, there is a sufficient quantity of that size. Say the job is a foolscap folio, and set to thirty-five ems pica, (if that be too wide it may be indented) the furniture for blanks and foot-stick will be found in the first drawer. The other furniture necessary to impose it, will, of course, depend upon its length, but, for the sake of example, suppose it be sixty-eight ems. It will be seen by a reference to the drawers, that there is no size exactly of that length, therefore the next size, seventy ems, which is two ems larger, will be the proper length of the side-stick. The foot-stick being exactly the width, there can be no fear of the side-stick being injured at the bottom end with locking, even though it is two ems longer than necessary, for it must be a very thin foot-stick that will not protect the length of two ems pica. If the furniture, against which the forme is locked, was an em or two longer than the side-stick and foot-stick, it would pre*vent both, in being* locked, from slipping. But the advan*tages of furniture* being in proper lengths must be too obvious *to require further* illustration.

### BRASS-RULE,

Like furniture, is also an important article in a case-room, and one in which there is, perhaps more than any other, the greatest waste. Where brass-rule is cut with the shears for every job that requires it, there never was, nor never can be, anything but waste, whatever the quantity may be to begin with. An employer in whose office this system is practised, may well be at a loss to know what all his rule is done with, the fact being that he is always buying, and yet his compositors are always wanting. Let him, however, look into the brass-rule box, and the mystery will be revealed if he will think; in that he will see hundreds of pieces, some of which are curled up with the shears, varying from a thin space to two and three ems pica, for which he has originally not only paid for as so many dozen lengths, but for which he has also paid his workmen for making useless. Nor can it, under this system, be different; for every compositor, anxious to make his work look well, will not use two pieces of rule, if he can get one. It is of little consequence that that one piece is too long, the shears will justify it, and thus another piece is added to the useless hundreds already accumulated in the box. And even though the rule be pieced, there is still the waste and loss of cutting; for it being almost impossible to find two pieces of rule exactly the length wanted, it is always necessary to cut one of the pieces less, and thus the waste is still increased. Nor is this all; frequent cuttings require frequent dressings; for if there is only a thin space taken off, there is not only additional time lost in doing so, but also an additional source of waste. For no one, acquainted with the business, can be ignorant that brass-rule, after frequent dressings, will be low, and, from this cause only, will in time be useless.

Surely, then, there is a necessity for improving the system, which will at least justify an attempt to alter it. Having myself made such an attempt, I venture to submit the result for the adoption of the trade, should its advantages be thought worth the first necessary outlay that it will incur.

If the experience gained from testing this system nearly five years give me any right to an opinion, I would say, that it is decidedly the interest of every employer, unless he has already adopted a better, also to adopt it; for this purpose I will endeavour to explain it. The method alluded to, which has been adopted with signal success, like the furniture, is to cut the rule at first into proper lengths, which entirely removes the necessity, afterwards, of either cutting or dressing. As it is necessary to provide for every probable size, these lengths must not only be short as well as long, but they must be cut to such a standard as, when all the lengths of one measure are up, two pieces, or more if necessary, joined, will supply the exact length. For this standard, then, I have chosen nonpareil, (or pica ens) as the most likely to answer the object sought. In cutting rule to this, begin with the longest length, (say thirty-five ems pica, which is the same, of course, as seventy ems nonpareil,) and, after cutting about eight or nine pieces, decrease a nonpareil em every length down to the shortest, (four ems nonpareil,) and cut about the same number of pieces for each intermediate size. The shortest being two ems pica and the longest thirty-five ems, the number of intermediate lengths will be sixty-eight, which if there be an equal number of each, say nine pieces, these sixty-eight lengths will piece and make the length of thirty-seven ems pica three hundred and six times without the least variation in any, or leaving a single piece unemployed. These are again applicable to almost an indefinite variety of combinations, and that too without either cutting or dressing, except what is necessary to take off the bur when the lengths are first cut.

Proper machines for cutting leads and brass-rule being now almost in every office, it is hardly necessary to observe, that any other method of cutting less certain than this should not be attempted. For it is only upon the accuracy of each length that there can be any certainty in piecing.

Brass-rule being thus properly cut into lengths, the next *inquiry is,* how can so many different lengths be arranged *and kept* without inconvenience? To this I answer, in a

case exactly the length, width, and depth of a common lower case. As, however, this would be considerably too small to be divided into sixty-eight boxes, the number of lengths, it will be necessary to have only one box for two sizes, which will reduce the number of boxes to thirty-four, and answer every convenience. These boxes will, of course, be of unequal lengths, in order to accommodate the different sizes which will be marked on the top of each box respectively. For a plan of a rule-case thus divided see page 130.

Although nonpareil is the proper standard for these sizes of rule, I have chosen rather to represent each length in the subjoined plan as so many ems pica, not only because that body is exactly twice the size of nonpareil, but because pica is the universal standard of leads, &c., and consequently more likely to avoid confusion. It will be understood, therefore, that 2 & 2½, 3 & 3½, 4 & 4½, &c., as stated, are ems and half ems pica, and is only a more familiar mode of expressing 4 & 5, 6 & 7, 8 & 9, &c., ems nonpareil.

The rule-case being exactly the size of an ordinary case, is peculiarly convenient, because, when in use, it can be placed on the frame as an upper case, which thus brings every length at once to hand; and because it can be kept in an ordinary case-rack when unemployed.

The quantity of rule required to make this case complete, would be about fourteen or fifteen dozens, which, unless required for very heavy rule-jobs, would be found sufficient for every purpose. The only way to avoid waste in cutting it, is to cut all the long lengths first. This plan will yield small pieces for the short lengths that otherwise would be lost if the opposite method was adopted.

The rule-case being completed, and supplied with proper sorts, it may not be uninteresting to those employers who may think the advantages insufficient to compensate for the additional outlay, to examine the system recommended more particularly. First, then, as to the expense it would incur. Supposing the fourteen or sixteen dozens to be sufficient to furnish this case, the probable amount, including the case,

PLAN OF BRASS RULE CASE.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2 and 2½ | 3 and 3½ | 4 and 4½ | 5 and 5½ | 6 and 6½ | 7 and 7½ | 8 and 8½ | 9 and 9½ | 10 & 10½ | 11 & 11½ | 12 & 12½ |
| 13 and 13½ | 14 and 14½ | 15 and 15½ | 16 and 16½ | 17 and 17½ | 18 and 18½ | 19 and 19½ | 20 and 20½ | | | |
| 21 and 21½ | 22 and 22½ | 23 and 23½ | 24 and 24½ | 25 and 25½ | 26 and 26½ | | | | | |
| 27 and 27½ | 28 and 28½ | 29 and 29½ | 30 and 30½ | 31 and 31½ | | | | | | |
| 32 and 32½ | 33 and 33½ | 34 and 34½ | 35 and 35½ | | | | | | | |
| Long lengths single rule. | | | Double brass rule. | | | | | | | |

might be somewhere between four and five pounds. Again, supposing this to last twenty years, which it certainly would, at least, the expense of rule would be somewhere between four or five shillings, and the wear something less than a dozen each year. As the consumption of brass-rule, on the old method of cutting it, depends upon the quantity of rule-work done, the probable expense incurred must depend on circumstances. But suppose it to be only one dozen in six months, (and there must be little rule work to require no more) the actual consumption in the same number of years (twenty) would be forty dozens, and incur the expense of at least ten pounds. Deducting the amount of the rule-case necessary in the first instance, the difference of expense between the two systems is obviously more than as much again, and that too in the amount of rule only. Surely, then, one is preferable to the other, even were there no other saving but in the expense for rule.

Though I have supposed brass-rule cut into proper lengths only to last twenty years, I am far from thinking that it will last no longer; my opinion is, that, if it be not often dressed it will not be done in even thirty. But it being my wish to show its least possible advantage, to say twenty years is sufficient for my purpose.

But this is not all; for work may be done by the new system in little more than half the time it could be by the old. For cutting and dressing rule being thus altogether dispensed with, the time which that would occupy being devoted to composing, the job must necessarily be got up sooner.

Thus far I have endeavoured to show the manifest difference between the new and old methods of cutting and using brass-rule; it only remains now to show that the first is applicable to any description of job in which rule is necessary. In attempting to do this, it is necessary first to observe, that, as every length of rule is cut to nonpareil ems, it is impossible, under any circumstances, that any length wanted can be a full nonpareil either longer or shorter than some particular one in the rule-case; because, if so, the next size

would be the exact length. As two leads of four to pica, then, are equal to a nonpareil, it follows, that a little more than the thickness of one of these leads will make all the difference either way, whatever the body of the type in which the job is set. If, for instance, the job be in minion, being the next size to nonpareil larger, it will be found that seven, twelve, sixteen, twenty-two, twenty-seven, and thirty-two ems minion, will exactly make even with eight, fourteen, nineteen, twenty-six, thirty-two, and thirty-eight ems nonpareil. As there can be no difficulty in getting the exact lengths of these and others which make even, I will take an intermediate length, and suppose the exact length of the rules required to be thirty ems minion. The nearest length of rule in the case to this is eighteen ems pica, which is nearly a lead too long. If, then, a lead be put at the top of each column, the difficulty is obviated and the rules exact. Surely there will be room in the length of a column to admit a lead; if not, is it worth while to set the job in something else, is a subject for consideration. By means of thick and thin leads, the body of every sized type may be accommodated to any length in the rule-case, and thus, by saving capital, time, and waste, prove one of the most important improvements in printing materials which has been effected for many years.

### THE BULK-RACK,

Being the proper place to put and distribute from formes laid up for distribution, is about the height of an imposing-stone, and is peculiarly convenient in every printing-office, so much so, indeed, that no employer, who consults his own interest, should be without one. Having a proper and convenient place to drop and put formes in, when picked of useful sorts, not only preserves order and regularity in an office, but also saves pie and vexation, as well as time, by all the unlocked formes being placed out of the way of accident. It is no uncommon thing, in offices where there is no such *convenience, to see* formes that have been dropped on boards *lying perhaps* one under a frame without a chase, with lines

picked and the whole going into pie; while on the stone or on the bed of the frame there is, perhaps, another forme equally bad or worse, from frequently being removed, kicked, and continually in the wrong place. It is useless to talk about they should be distributed—if work is wanted, it must be done, whether there be the sorts in case or not. If sorts be not at hand, they must be picked, which necessarily loses time, under any circumstances, but more particularly when the formes thus picked are to be carried about the office and thrust away anywhere where it is the most convenient. Although picking formes should be avoided as much as possible, by frequently distributing, yet circumstances will occur which make it impossible to do without it. When the necessity for it, therefore, does occur, a convenience for doing it readily and safely is indispensable; and this is attained by a bulk, in which is a rack that will hold double crown letter-boards, and the formes that may be dropped on them. These, when slided in the rack, are safe, and may be again examined for any missing sort without either danger of breaking or annoyance. But it is decidedly the interest of employers not to let formes stand, unless by a special order, when, of course, they are paid for. It is an error for employers to suppose that distributing is only time lost; yet it is not uncommon for an employer to exhibit uneasiness and even dissatisfaction at seeing it done. An instance, indeed, is not wanted, of an employer telling his hands to "leave off distributing, and get on with their work." But it is only necessary for such to think for a moment, where are the sorts for other jobs to come from, if there be no special season for distribution, and I am persuaded that such an objection would at once cease.

## No. II.

## THE PRESS-ROOM.

ESSENTIALS FOR GOOD WORK.—GOOD INK.—INKING APPARATUS.—PRESS BLANKETS.—FORME RACK, ETC.

Though every improved material in a press-room is already well known and some duly appreciated, there are a few things which seem to require particular notice. The more so, as I know there are some employers who, although anxious to have their work executed neatly, are not sufficiently aware of their importance in contributing thereto. After good paper, which it is not necessary to particularize, the first essential for good work is

### GOOD INK,

Which, of all the materials used in printing, is, perhaps, the most important. It must be of excellent colour. Formerly, this was deemed to consist in an exceeding dark hue, not exactly black, but black enriched with a hue of the darkest blue or purple. This gave indescribable effect to the works for which it was used, a richness, a gorgeousness, which it is impossible to describe; but the works of Baskerville and Bulmer, especially the Milton of the latter, afford the best specimens. Now, we hold perfection to consist in the intensest black, and all the resources of chemistry and the arts have been sought to attain this end. It must stand for ever; but here we have miserably failed. Compare the productions of the old printers with those of twenty years back. What a difference! The works of the Aldi and Elzevirs, of Plantinus, Caxton, Pynson, and Grafton, preserve their colour as intense as the day they were printed; *there is no yellowness* or brownness, no foxiness, whilst the

books of those of 1810—20 are wretchedly discoloured. Where fine printing has been required and paid for, the modern ink is no whit inferior to the ancient. Witness the before-mentioned works of Bulmer, Macklin, Ritchie, Bowyer, Baskerville, and others; but certain it is that the ink in general use twenty years ago was of very inferior quality. It must be perfectly mixed, and ground until it is absolutely impalpable, otherwise it will speedily clog the type and inking apparatus; it must adhere to the paper and not to the type, or it will tear off the face of the former, and clog up the latter; it must be sufficiently thick; it must keep perfectly undried when in large masses, and dry very quickly when it is distributed in thin surface. Such constitutes good ink. The improved

INKING APPARATUS

Is also very important for the production of good work, because it is by this means only, that anything like regularity of colour can be preserved, without infinite care and labour. No employer, therefore, should be without one, unless, indeed, he is indifferent about his work.

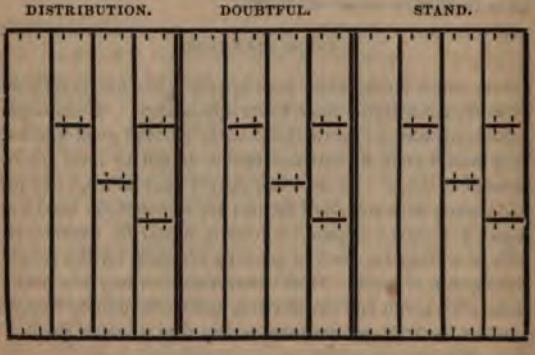
PRESS BLANKETS,

Of the finest cloth, when kept specially for one description of work, contributes much to its appearance. If employers would only observe for themselves, the effect of good blankets, they would soon be satisfied that it is not to their interest to neglect them. Every office should have at least one pair of blankets for each sized forme; for instance, for bookwork a pair for quarto, a pair for octavo, a pair for twelves, &c., &c., as well as two pair of jobbing blankets for the rougher description of work. With these facilities any job may be done with credit and satisfaction, and would doubly compensate for the trifling additional outlay that it would incur.

THE FORME RACK

Is a recent improvement in the Press-room, and intended to supersede formes hanging on nails or being reared against

the wall; it is an admirable method of protecting them from falling out or being battered, and well worth the attention and adoption of employers. It is simple, and may be made at little expense, and requires but little room. It is made with grooves at the bottom and top, so that the formes will stand on their edges perpendicularly, which entirely secures them from accident. The grooves are fitted to every sized chase, by divisions, which are made so as to make two or three of the smallest size come in the same height as the largest. This rack being made for about half-a-dozen chases of every size, it is then divided into three divisions, and labelled; the first for those formes which are to "stand," the second for those which are "doubtful," and the third for those for "distribution." The advantages of this plan are too obvious to need recommending. The formes being altogether on their edges, there can be no difficulty in finding any, and no fear of any being distributed which are either doubtful or to stand. The following plan, though only for a few sizes, may be carried to any extent:—



## ACTS OF PARLIAMENT RELATIVE TO PRINTERS.

By the Act 13, Geo. II, cap. 19, (to restrain and prevent the excessive increase of horse-races, &c.) it is enacted, "That every person or persons who shall make, print, publish, advertise, or proclaim any advertisement or notice of any plate, prize, sum of money, or other thing, of less value than fifty pounds, to be run for by any horse, mare or gelding, shall forfeit and lose the sum of one hundred pounds."

By the Act 25, Geo. II, cap. 36, (for the better preventing thefts and robberies,) it is enacted, "That any person publicly advertising a reward with 'No questions asked,' for the return of things which have been stolen or lost, or making use of any such words in such public advertisement, &c., shall, for every such offence, forfeit fifty pounds."

The Act 39, Geo. III, cap. 79, (for the more effectual suppression of societies established for seditious and treasonable purposes,) contains several provisions and penalties respecting printers, letter founders, and printing press makers.

Sect. 23 enacts, "That, from and after the expiration of forty days from the day of passing this Act, every person having any printing press, or types for printing, shall cause a notice thereof, signed in the presence of and attested by one witness, to be delivered to the clerk of the peace acting for the county, stewartry, riding, division, city, borough, town, or place, where the same shall be intended to be used, or his deputy, according to the form prescribed in the schedule hereunto annexed; and such clerk of the peace, or deputy respectively, shall, and he is hereby authorized and required to grant a certificate in the form prescribed in the schedule hereunto annexed, for which such clerk of the peace, or deputy, shall receive the fee of one shilling, and no more; and such clerk of the peace, or his deputy, shall file such notice, and transmit an attested copy thereof to one of his Majesty's principal secretaries of state; and every person who, not having delivered such notice and obtained such certificate as aforesaid, shall, from and after the expiration of forty days next after the passing of this Act, keep or use any printing press or types for printing, or, having delivered such notice and obtained such certificate as aforesaid, shall use any printing press or types for printing in any other place than the place expressed in such notice, shall forfeit and lose the sum of twenty pounds."

Sect. 24 exempts his Majesty's printers, and the public presses belonging to the two universities.

Sect. 27 enacts, "That from and after the expiration of forty days after the passing of this Act, every person who shall print any paper or book whatsoever, which shall be meant or intended to be published or dispersed, whether the same shall be sold or given away, shall print upon the front of every such paper, if the same shall be printed on one side only, and upon the first and last leaves of every paper or book which shall consist of more than one leaf, in legible characters, his or her name, and the name of the city, town, parish, or place, and also the name (if any) of the square, street, lane, court, or place, in which his or her dwelling-house, or usual place of abode, shall be; and every person who shall omit so to print his name and place of abode on every such paper or book printed by him, and also every person who shall publish or disperse, or assist in publishing or dispersing, either gratis or for money, any printed paper or book, which shall have been printed after the expiration of forty days from the passing of this Act, and on which the name and place of abode of the person printing the same shall not be printed as aforesaid, shall, for every copy of such paper so published or dispersed by him, forfeit and pay the sum of twenty pounds."

Sect. 28 exempts papers printed by authority of Parliament.

Sect. 29 enacts, "That every person who, from and after the expiration of forty days after the passing of this Act, shall print any paper for hire, reward, gain, or profit, shall carefully preserve and keep one copy (at least) of every paper so printed by him or her, on which he or she shall write, or cause to be written or printed, in fair and legible characters, the name and place of abode of the person or persons by whom he or she shall be employed to print the same; and every person printing any paper for hire, reward, gain, or profit, who shall omit or neglect to write, or cause to be written or printed as aforesaid, the name and place of his or her employer on one of such printed papers, or to keep or preserve the same for the space of six calendar months next after the printing thereof, or to produce or show the same to any Justice of the Peace, who, within the said space of six calendar months, shall require to see the same, shall, for every such omission, neglect, or refusal, forfeit and lose the sum of twenty pounds."

An Act was passed on the 10th June, 1811, to amend and explain the above Act, by which it is enacted, "That nothing in the 27th Section of the said Act contained, shall extend to make any person or persons offending against the same, liable to more than twenty-five forfeitures or penalties, for printing or publishing, or dispersing, or assisting in publishing or dispersing, any number of copies of one and the same paper or book, contrary to the said Section of the said Act."

*By the* 2nd Section of this Act, power is given to the magistrates *to mitigate the* same to any sum not less than five pounds, with all

reasonable costs incurred in the prosecution; and, by the 4th Sect., persons convicted under this amended Act, may, if they think themselves aggrieved, appeal to the Quarter Sessions; where the Justices, if they see cause, may mitigate any penalty or penalties, and may order any money to be returned which shall have been paid or levied under any conviction as aforesaid, and may also order and award such costs to be paid by either party to the other as they shall think and judge reasonable.

*Form of Notice to be given to the Clerk of the Peace, that any Person keeps any Printing Press, or Types for Printing.*

To the Clerk of the Peace for [here insert the county, stewartry, riding, division, city, borough, town, or place,] or his deputy.

I, A. B. of do hereby declare, that I have a printing press and types for printing, which I propose to use for printing within [here insert the place where the business is to be carried on,] and which I require to be entered for that purpose, in pursuance of an Act passed in the thirty-ninth year of the Reign of his Majesty King George the Third, entitled, "An Act for the more effectual suppression of societies established for seditious and treasonable purposes, and for better preventing treasonable and seditious practices." Witness my hand, this day of

Preston: Charles Ambler, Printer, Fishergate.

TO LETTER-PRESS PRINTERS.

## MESSRS. CLYMER & DIXON,

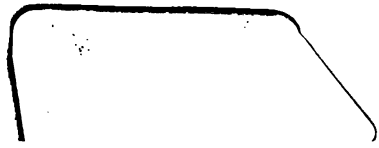
PATENTEES AND MANUFACTURERS OF THE COLUMBIAN PRINTING PRESS,

10, *Finsbury Street, Finsbury Square, London,*

HAVE much pleasure in announcing to the trade, that, having availed themselves of every improvement pointed out to them by practical printers, or which their own experience and observation as mechanics have suggested during the last eleven years, they are now manufacturing the COLUMBIAN PRESSES in every respect in so superior a manner that they seem scarcely susceptible of further alteration or improvement. Their excellence, indeed, may fearlessly challenge competition,—their durability is such as to defy the effects of constant work,—their construction

allows them to be worked without a laborious effort,—the impression is uniformly without a defect,— a fount of letter will work with them more than twice as long as with any other kind of Press that has hitherto been invented,—their accuracy is such as to supersede the use of overlays, and the simplicity of their action so great as to enable any pressman to use them with entire success without instructions. From the care bestowed in adapting them to every description of work, they will also be found cheaper than ordinary Presses at a lower rate.

Messrs. CLYMER and DIXON feel called upon to caution buyers of Presses against a BUNGLING imitation said to be manufactured at a "Columbian Press Manufactory," with all the EXTERNAL marks of the genuine Press, but destitute of every advantage for which that Press has been so justly celebrated. To prevent fraud and deception, it will, however, be necessary to state, that their ONLY Manufactory is at No. 10, FINSBURY STREET, FINSBURY SQUARE, LONDON, and that all SO-CALLED Columbian Presses, as made elsewhere, are SPURIOUS.

Testimonials, with the terms and prices of the various sizes, may be had, on application by post, or otherwise, as above.

☞ Cylindrical Inking Tables, Iron Imposing Tables, with turned Surfaces, Roller Moulds, Iron Side and Foot Sticks, Chases, &c., &c., on reasonable terms.